Serving Los Angeles and
Ventura Counties

2000/01 Annual Report

California Environmental Protection Agency

California Regional Water Quality Control Board,
Los Angeles Region

Our mission is to preserve and enhance the quality of our Region's water resources for the benefit of present and future generations.

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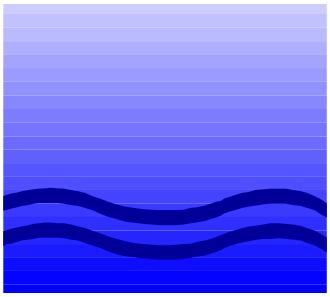


LARWQCB management and staff contributed to the writing of this document.

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD MEMBERS DURING FY 00/01

H. David Nahai, Chair

Mr. Nahai was appointed to the Board in March 1997. He has been an attorney with Nahai Law Corporation since 1992 and was recently appointed as a member of the Enforcement Order Review Panel. Mr. Nahai's appointment category is Water Quality.

Francine B. Diamond

Ms. Diamond was appointed to the Board in March 1999. She has been the principal partner in Media Partners, a communications consulting firm, since 1994. In 1992, Ms. Diamond founded the Los Angeles Resource Connection. This organization links social and health services with low-income students and families in inner city schools to increase educational opportunities. She has been a member of the Executive Board of the California League of Conservation Voters since 1990. Ms. Diamond has served as the vice-chair of the Los Angeles County Beach Advisory Commission for six years. Ms. Diamond's appointment category is Public Member.

Susan M. Cloke

Ms. Cloke was appointed to the Board in November 1999. She is the principal with Stonebridge, a land use and development consulting firm. Since 1994, she has served as a commissioner representing Los Angeles County Supervisor Gloria Molina on the Marina Del Rey Design Control Board. Ms. Cloke's appointment category is County Government.

Robert L. Miller

Mr. Miller was appointed to the Board in December 1999. He was a partner with the investment bank, Building and Construction Capital, from 1994 to 1998. He worked for West Venture Development Company from 1980 to 1991. He is also a licensed general contractor, a member of the Stanford Institute of Qualitative Social Sciences, an active outdoorsman, and a member of Ducks Unlimited, an animal preservation group. Mr. Miller's appointment category is Recreation, Fish, and Wildlife.

Timothy J. Shaheen

Mr. Shaheen was appointed to the Board in December 1999. He has served as the chief executive officer for Sun World International, Inc. since 1996. From 1980 to 1996, he was senior vice-president of Albert Fisher, one of the country's largest processors and distributors of fresh produce. From 1982 to 1989, Mr. Shaheen served as a senior manager at Ernest & Young, a public accounting firm. He is a member of the United Fresh Fruit and Vegetables Association and the Produce Advisory Board. Mr. Shaheen's appointment category is Irrigated Agriculture.

Christopher Pak

Mr. Pak was appointed in November 2000. He is the CEO and President of Archeon Group in Los Angeles, a multi-disciplined architectural, planning, and interiors firm. Mr. Pak's appointment category is Municipal Government.

There were four vacancies on the Board during the fiscal year. Jack Coe and Marilyn Lyon[1] left the Board after their terms expired in the fall of 2000. During the fiscal year for this report, three new board members were appointed including Bradley H. Mindlin, Christopher C. Pak, and Larry Kosmont. Mr. Kosmont resigned in August 2001. Currently, there are two vacancies on the Board in the Water Quality and Water Supply categories.

The Governor of California appoints the nine-member Regional Board, whose members serve four-year terms once they are confirmed by the State Senate. Members of the Regional Board serve part-time and conduct their business at regular meetings where public participation is encouraged. The Board normally holds public meetings ten times per year to make decisions on water quality matters.

Regional Board members represent specific categories related to the control of water quality, and must reside in, or have a principal place of business within, the Region. The Board relies on the Regional Board staff to conduct the day-to-day tasks associated with water quality management.

[1] Marilyn Lyon, Vice Chair

Ms. Lyon was appointed to the Board in April 1997. She is the owner and operator of Lyon and Associates, a marketing and business development firm. She also serves as a councilmember for the City of Rancho Palos Verdes. Ms. Lyon's appointment category is Municipal Government.

Jack J. Coe, P.E., Ph.D.

Dr. Coe was appointed to the Board in December 1992. He has served as a principal civil engineer consultant with the Boyle Engineering Corporation since 1985, after a career with the State Department of Water Resources. Dr. Coe's appointment category is Water Supply.

REGION 4 OVERVIEW

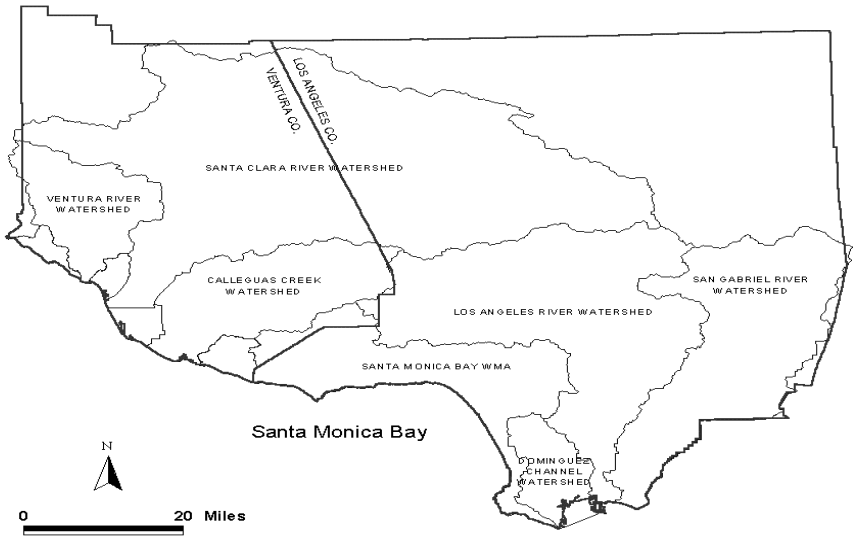
With 10 million residents, the Los Angeles Region is the most densely populated of the nine Regions managed by the California Regional Water Quality Control Board. It encompasses all the coastal watersheds of Los Angeles and Ventura Counties, along with very small portions of Kern and Santa Barbara Counties. Land use within the Region varies considerably. In Ventura County, agriculture and open space exist alongside urban, residential, and commercial uses. In southern Los Angeles County, the predominant land uses include urban residential, commercial, and industrial. In northern Los Angeles County, open space is steadily being transformed into residential communities.

With a projected population of more than 13 million by the year 2015, the Los Angeles Regional Board will continue to confront complex issues relating to protection of our valuable water resources and associated beneficial uses. Staff consist mostly of engineers, geologists, and biologists. Implementing programs according to state and federal law and following the Board's direction, staff develops water quality standards and policies, drafts permits, oversees remediation of contaminated sites, conducts enforcement activities, and works directly with the public on a regular basis.

The Los Angeles Region has been divided into 10 watersheds or watershed management areas (WMA) with multiple watersheds:

Ventura County Coastal WMA
Ventura River Watershed
Santa Clara River Watershed
Santa Monica Bay Watershed
Channel Islands WMA
Los Angeles River Watershed
San Gabriel River Watershed
Calleguas creek Watershed
Dominguez Channel/LA//Long Beach Watershed
Los Cerritos Channel/Alamitos Bay WMA

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD AREA MAP



A staff of 180 works to preserve and protect water quality in the coastal watersheds of Los Angeles and Ventura Counties. In addition to Regional Monitoring Programs and the Santa Monica Bay Restoration Project, the Regional Board is organized into two divisions: Surface Water and Groundwater. The Surface Water Division includes the Watershed Regulatory and Regional Programs sections. The Groundwater Division includes the Underground Tanks, Remediation, Storm Water, and Enforcement and Groundwater Permitting sections.

Surface Water Division

Watershed Regulatory

- Regulates approximately 44 major and 625 minor NPDES permitted dischargers.
- Conducts approximately 500 site inspections each year.
- Reviews approximately 3000 self-monitoring reports each year.
- Enrolls approximately 200 dischargers under general permits each year.

Regional Programs

- Responsible for the Regional Board's planning functions, including the preparation of TMDLs and Basin Plan amendments.
- Over 100 water quality certification applications were processed in FY 00/01.
- Water quality and wetlands protection efforts through the 401 certification program.
- The Information technology unit manages the web site, and oversees networking equipment and computer training.
- The Watershed Management integrates, coordinates, and manages programs to better protect water resources.

Groundwater Division

Underground tanks

Manages 1,060 active leaking underground storage tank cases (many addressing MTBE pollution, especially in the Santa Monica area) and provides guidance to local agencies, managing an additional 1,230 cases.

Remediation

Oversees cleanup activity at sites with soil and groundwater contamination. Since the program began, there have been 270 site closures, 450 active cases, and 60 inactive cases.

Storm Water

- Regulates storm water through three Municipal storm water NPDES Permits covering 86 cities in Los Angeles County and 12 cities in Ventura County.
- Regulates runoff from one-third (about 3,000) of the industrial facilities in the State of California – more than any other Regional Board, and 900 construction.
- Conducts approximately 900 industrial and construction site inspections each year.

Enforcement and Groundwater Permitting

- Issues formal and informal enforcement actions and along with the Watershed Regulatory section, performs NPDES compliance inspections.
- Regulates approximately 150 Non-NPDES facilities and 52 waste management facilities.
- The Contaminated Sediments task force continues to develop a long-term management plan for dredging and disposal of contaminated sediments.

Surface Water Division

REGIONAL PROGRAMS SECTION

The Regional Programs Section includes four Units: Two Standards and Total Maximum Daily Load (TMDL) Units, Nonpoint Source Unit, and Information Technology Unit. In addition, the Section includes a Watershed Coordinator who oversees the Watershed Management Initiative.

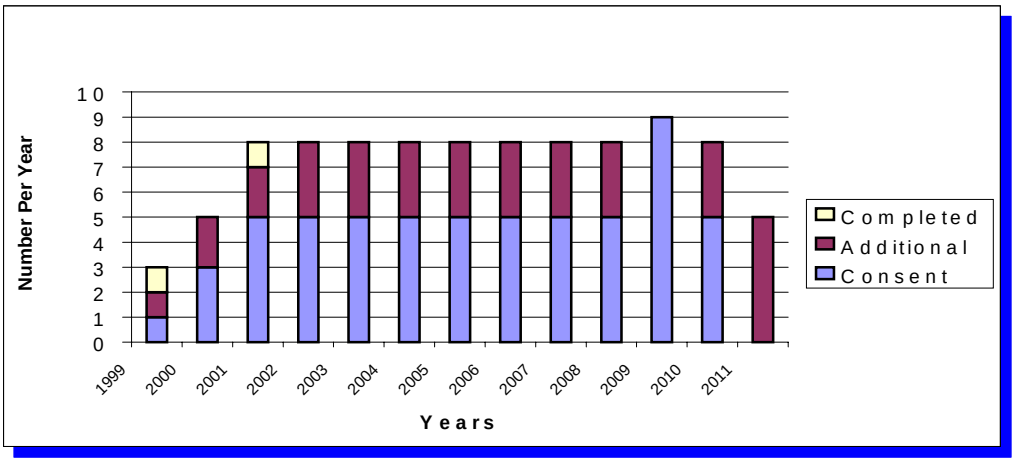
Standards & TMDL Units

The Standards and TMDL Units are responsible for the Regional Board's planning functions, including the preparation of Total Maximum Daily Loads. A Total Maximum Daily Load (TMDL) is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and non-point sources. The calculation must include a margin of safety to ensure that the waterbody will fully support the most sensitive designated beneficial use and account for seasonable variation in water quality.

Section 303(d)(1)(a) of the Clean Water Act (CWA) requires each state to identify those waters for which effluent limitations (i.e., technology-based point source controls) alone are not stringent enough to maintain applicable water quality standards. States are required to establish a priority ranking for these "impaired" waters, known as the 303(d) list. TMDLs designed to restore water quality to applicable water quality standards must be prepared for 303(d) listed impairments. On California's 1998 303(d) list, the Los Angeles Regional Water Quality Control Board (RWQCB) identified 832 waterbody reaches as water quality impaired. Since this listing, these impaired reaches have been consolidated into 92 "TMDL Analytical Units" in order to better manage and prioritize impaired watersheds for TMDL development.

A consent decree between Heal the Bay, Santa Monica BayKeeper et al., and USEPA was signed on March 22, 1999. The consent decree establishes a schedule for the completion of 92 TMDL analytical units within the Los Angeles Region, during the next 11 years. The schedule specifies a due date for the completion of specified TMDLs (consent TMDLs) that are to be completed during specific years. Additional TMDLs necessary to complete all 92 Analytical Units by the end of the 11-year period have been distributed throughout this period to even out the workload. Two of the 92 TMDLs have been completed since March 22, 1999 (see Figure 1).

Figure 1 – TMDL Workload:



Fiscal Year 00/01 Accomplishments:

Accomplishments included completion of the Los Angeles trash TMDL, preparation of a Basin Plan Amendment for Chloride in the Santa Clara River, and completion of substantial work on several other TMDLs. In addition, staff presented the Region's Triennial Review list of Basin Planning priorities, continued public outreach, and continued the efforts of the Dominguez Channel Watershed Advisory Council.

- **Los Angeles Trash TMDL:** The Los Angeles River Trash TMDL was adopted on January 25, 2001. The purpose of this TMDL is to reduce the excessive amounts of trash found in all reaches of the Los Angeles River and its tributaries. The TMDL holds Los Angeles County and its incorporated cities within the watershed accountable for discharges of trash from their municipal storm drain systems. It establishes a 14-year implementation plan for reducing these discharges and sets a final waste load allocation of zero trash.

- **Santa Clara River Chloride Basin Plan Amendment:** Staff presented a Basin Plan Amendment to modify the chloride objective in specific reaches of the Santa Clara River to the Regional Board in December of 2000. The Regional Board adopted the staff recommendation to modify the objective in one reach and to prepare a TMDL for the other reaches.

- **Los Angeles River Nutrients TMDL:** A preliminary draft nutrient TMDL was completed by USEPA in June 2001 for internal review. The Regional Board staff will provide USEPA with comments on proposed load allocations scenarios, effluent limits, and other TMDL components.

- **Los Angeles River Pathogens TMDL:** Source assessment activities for this TMDL were completed in January 2001. Water quality modeling for the pathogens TMDL is currently underway.

- **Malibu Creek Nutrient and Pathogens TMDLs:** A complete quantitative assessment of pollutant sources within the watershed was completed in April 2001. The data from the source assessment is being used to calibrate a water quality computer model. The model will be used as tool in developing the TMDL.

- **East Fork San Gabriel River Trash TMDL:** The Total Maximum Daily Load (TMDL) for the East Fork of the San Gabriel River was approved by the SWRCB on June 15, 2000, the State of California Office of Administrative Law on September 9,2000, and the USEPA on December 15, 2000 as meeting all applicable legal requirements. The TMDL sets a numeric target of zero (0) trash to the river. The U.S. Forest Service also has a load allocation of zero trash in the river, establishes monitoring requirements.

- **Calleguas Creek chloride TMDL:** A draft TMDL for chloride in Calleguas Creek was circulated for internal review in June of 2001. The draft incorporates substantial commentary by stakeholders, via multiple public stakeholder meetings over the past two years and a scientific study by a consultant hired by stakeholders. The draft includes an implementation plan and schedule structured to accommodate construction and operational needs of some stakeholders expected to be most heavily affected.

- **Triennial Review of Basin Planning Priorities:** On May 31, 2001, staff presented to the Board the Region's Triennial Review list of Basin Planning priorities, as required by the California Water Code and the federal Clean Water Act. During the Triennial Review, staff identified 50 issues, of which 32 were ranked as high priorities, through a series of public workshops, meetings with EPA, and internal meetings to identify necessary revisions to the Basin Plan. Staff concluded that the 7 highest priorities could be addressed with existing Basin Planning resources, and several other priorities could be addressed with other program resources. In sum, staff surmised that half of the high priorities could be addressed in the next three years (the Triennial Review planning horizon). The Board adopted the list of Basin Planning priorities with some modifications. Specifically, the Board chose to move to a high priority two additional items: re-consideration of a Basin Plan amendment to authorize compliance schedules in NPDES permits and development of a nonpoint source enforcement policy. In addition, the Board re-arranged the ranking of the high priority items, but kept the top 7 priorities as staff recommended.

- **Public outreach efforts:** In addition to public outreach efforts directly associated with the development of specific TMDLs, Staff has participated in workshops, tours, forums, and conferences, presenting on various water quality topics and the state of the TMDL program.

- **Dominguez Channel WAC:** The Dominguez Channel Watershed Advisory Council TMDL subcommittee conducted its first meeting at the City of Torrance City Hall on June 11, 2001. Regional Board staff have completed their review and data analysis of storm water quality data gathered by Los Angeles County along the channel. For completeness and expediency, the data analysis included assessment of metals and ammonia data. The data assessment phase for coliform is nearing completion. The Regional Board initiated the process of drafting a TMDL for pathogens for the Dominguez Channel and the Los Angeles/Long Beach Harbors, and preparing for a TMDL workshop later in the fall of the year 2001.

Nonpoint Source Unit

The Nonpoint Source Unit implements requirements from both Section 319 of the Clean Water Act and the Coastal Zone Act Reauthorization Amendments (CZARA) of 1990 by providing a unified and coordinated approach to control Nonpoint Source pollution in the state. Our regional strategy focussed on urban and agriculture impacts.

Fiscal Year 00/01 Accomplishments:

The Nonpoint Source Unit continued their progress on the 401 Water Quality Certification Program, participated in developing the statewide program and implementation strategy, provided education and outreach, and assisted in the development and release of Proposition 13 request for proposals.

- **401 Water Quality Certification Program**: The Nonpoint Source Program (NPS) implements requirements from both Section 319 of the Clean Water Act and the Coastal Zone Act Reauthorization Amendments (CZARA) of 1990 by providing a unified and coordinated approach to control Nonpoint Source pollution in the state. Our regional strategy focussed on urban and agriculture impacts.

  Staff developed and implemented several new procedures to comply with the revised regulation and advance public involvement and program consistency. Our web page now has the revised regulation, application, fee schedule, current public notices, and recently issued certifications available for review. Procedures were developed for enforcement of "After the Fact" certifications and general mitigation ratios for wetland impacts. Staff expanded our working relationship with other regulatory agencies facilitating coordinated reviews and enforcement. Notices of Violations were issued to two project proponents for failure to submit information. Long-term watershed preservations were established as mitigation for several large projects ensuring large-scale watershed protection.

  All Certifications are public noticed on our web page at http://www.swrcb.ca.gov/rwqcb4/html/meetings/401wqc.html. We encourage the public to contact us on any questions or comments that they have on proposed projects.

- **Statewide program and implementation strategy:** Participated in developing the statewide program and implementation strategy. The implementation strategy is a stepwise approach to assess the resources, target the sources, and prioritize the activities to control the impacts. Staff drafted the first of three five-year implementation schedules that identifies the areas that we plan to focus on.

- **Education and Outreach:** An electronic subscription was established on the Regional Board's web page to facilitate educating and inform stakeholders of NPS activities. Currently, we have a list of over 300 stakeholders. Staff has developed several educational brochures including Erosion and Sediment Control, Nutrient Management, Pesticide Management, Irrigation Water Management, and On-site Disposal Systems. Staff has also compiled a NPS library of relevant educational documents. Four quarterly coordination meetings were held with Regional staff to facilitate implementation of NPS control activities. In addition two outreach workshops were held to educate the public and request comments on regional funding priorities.

- **Proposition 13:** Staff assisted in the development and release of the Proposition 13 request for proposals. Region 4 received approximately seventy proposals from a variety of organizations. Staff ranked these proposals and compared them to the other 180 proposals through out the state. Staff helped establish a state wide priority list that was later approved by the State Board. Region 4 received approval to fund 11 projects with an estimated value of 3.8 million dollars. Staff has initiated discussions with several of these project proponents to develop detailed scope of work that is necessary to formalize the funding.

Information Technology Unit

The IT Unit administers the website and the computer networking equipment, and has primary responsibility for GIS coordination and database activities in the office. Our goal is to provide a high quality of service. IT Unit staff are resourceful in meeting many short deadlines in route to satisfying our customers. One of our main challenges is prioritizing the competing needs of many stakeholders.

Fiscal Year 00/01 Accomplishments:

Accomplishments for the past fiscal year include GIS training for more than 100 staff, upgrading the LAN equipment, data entry for SWIM, and increasing the functionality of the web site.

- **Geographic Information System Training:** IT Unit staff trained about 100 board staff to use Geographic Information System (GIS) software to do much of their own mapping and analysis. Additionally, 24 board staff received complemental training from an outside instructor. IT Unit staff have also worked with the TMDL Unit in processing land use data and city boundaries for the Ballona Creek Trash TMDL. IT staff generate a wide range of maps for both surface and groundwater staff and the public. We also have two Global Positioning System (GPS) units that staff can take with them in the field for obtaining location information on wells, sampling locations, etc.

- **Update SWIM Database:** IT staff has continued to assist the State Board in the statewide implementation of the System for Water Information Management (SWIM) database. Our staff has provided several training sessions for all of the other Regional Boards. We have also continued to provide statewide leadership in database development and trouble-shooting activities for this evolving system. IT staff has created many types of reports on the SWIM database to help both Regional Board staff and the public. Database staff have brought the SWIM permit tracking data input up to date and have begun entering environment data. We also finished programming the security module, which is used to assign appropriate rights to the users.

- **New LAN Equipment:** The LAN was brought up to date in 2000/2001 by replacing current hubs with a switch. This makes the LAN ten times faster.

- **Increase Functionality Of Web Site:** The IT Unit is responsible for maintaining and updating the web site. Our goal for the web site during 2000/2001 was to increase the functionality and efficiency of the web site by implementing database capability. We began this by converting the telephone contact lists from text to a database. This makes updating the web site much easier. A view of the homepage is shown in Figure 1.

Figure 2 - View of LARWCB Home Page:

Watershed Management Initiative

Watershed management is a strategy for integrating, coordinating, and managing programs to better protect water resources. The goals of the State's Watershed Management Initiative (WMI) are to integrate water quality monitoring, assessment, planning, standards, permit writing, nonpoint source management, groundwater protection, and other programs at the State and Regional Boards as much as possible to promote a more coordinated and efficient use of personnel and fiscal resources while ensuring maximum water quality protection benefits. Watershed management represents a shift from a traditional approach that focuses on singular regulation of point sources, to a more geographical approach that acknowledges environmental impacts from diverse activities.

Each Regional Board, the State Board, and USEPA were required to produce a regional "Chapter" for the State Board's WMI strategy. The Chapters describe how collectively the state will work together to implement the WMI, both in the short- and long-term, while still fulfilling various state and federal mandates. In our Chapter, water quality problems in our Watershed Management Areas are described as well as our proposed approaches to resolving these problems. Funding needs are also identified. In fact, the document is being coordinated with the state budgeting process and is helping to guide the way federal monies are distributed for grant programs, monitoring, TMDLs, nonpoint source, and eventually, other programs. Funding under WMI provides for a Watershed Coordinator position at each Regional Board. The coordinator is responsible for leading internal team efforts (across program boundaries) to address watershed issues. The coordinator also regularly briefs

program staff and management on watershed scale issues; provides technical support to permitting, nonpoint source, and TMDL staff; and is responsible for meeting WMI commitments.

Implementation of watershed management in this Region includes utilizing a five-year rotating watershed schedule for permit renewal purposes. “Targeted” watersheds are also a high priority for grant funding (319(h)/205(j)/Proposition 13) and for ambient monitoring funds.

Fiscal Year 00/01 was the sixth year of implementing the WMI in the Los Angeles Region. The WMI has attempted to obtain information on all of the contributing pollutant sources by bringing together groups of stakeholders within a defined watershed and working with them to accomplish the following goals:

- Obtain all available information on the “state of the watershed”
- Identify water quality problems in the watershed
- Promote uniformity in the regulation of pollutant sources
- Coordinate monitoring programs
- Determine the options or alternatives for pollutant reduction
- Assist stakeholders in developing and implementing watershed management plans

Fiscal Year 00/01 Accomplishments:

Staff prepared the sixth update of the Watershed Management Chapter, which targeted several watersheds, participated in local watershed planning efforts, and participated in the statewide ranking process for several grant programs.

- The Region's Watershed Management Chapter was updated in December 2000. Hard copies of the document may be obtained by contacting the Regional Programs secretary at the Regional Board office. Electronic copies are available on the Regional Board website under “Regional Programs.”

- Permits in the watersheds were reviewed and updated and a “State of the Watershed Report" was produced for the Ventura River Watershed (in draft form) which provides a physical description of the watershed (including GIS-based maps), its beneficial uses, an analysis of available water quality monitoring data, a description of dischargers, and our schedule for completion of TMDLs for impaired reaches. When finalized, hard copies of the report may be obtained by contacting the Regional Programs secretary at the Regional Board office. Electronic copies may be obtained by contacting Shirley Birosik, Watershed Coordinator, at sbirosik@rb4.swrcb.ca.gov or by phone at (213) 576-6679.

- Participation in local watershed planning efforts with the Los Angeles/San Gabriel Rivers Watershed Council, Friends of the San Gabriel River, Malibu Lagoon Task Force, Topanga Watershed Committee, Ventura River Matilija Dam Task Force, Calleguas Creek Watershed Management Plan Committee, Dominguez Channel Watershed Advisory Committee, and the Southern California Wetlands Recovery Project. Staff attended stakeholder meetings and workshops, conducted presentations, distributed water quality data, served as a technical advisor, and prepared GIS-based maps.

- As part of outreach activities for Proposition 13 grant funding, staff met with prospective applicants, reviewed and commented on draft proposals, conducted regional ranking of proposals, and participated in the statewide ranking process with the WMI Workgroup. A similar process for the 319(h) and 205(j) grant programs was also conducted.

WATERSHED REGULATORY SECTION

The Watershed Regulatory Section includes the following three Units: Municipal Permitting, Industrial Permitting, and General Permit/Special Projects. The Watershed Regulatory Section implements National Pollutant Discharge Elimination System (NPDES) permitting, permitting of discharges to land (Waste Discharge Requirements), and water reclamation requirements (WRRs). Once permitted, the three units are responsible for monitoring of compliance with permit requirements and first level enforcement actions for non-compliance.

NPDES permits are required by all dischargers that discharge pollutants from any point source into waters of the United States. The regional boards issue NPDES permits in accordance with a Memorandum of Agreement (MOA) between the U.S. EPA and the State. Additionally, indirect dischargers (i.e., those facilities that discharge to a POTW) also receive oversight by the Watershed Regulatory Section through the pretreatment program.

Due to changes to the Clean Water Act and the Code of Federal Regulations, storm water is, under certain circumstances, considered a point source, subject to regulation under the NPDES program. Although a separate storm water NPDES section was created in 2000 to regulate municipal separated storm sewer systems, individual storm water permits for industrial facilities are still regulated by the Watershed Regulatory Section.

Fiscal Year 00/01 Accomplishments:

Accomplishments include a focus on NPDES permitting in the Dominguez Channel watershed, continued permitting in the Los Angeles and San Gabriel River watersheds, the issuance of industrial, municipal and general permits, and permit improvements based on new policies and monitoring programs.

Dominguez Channel Watershed

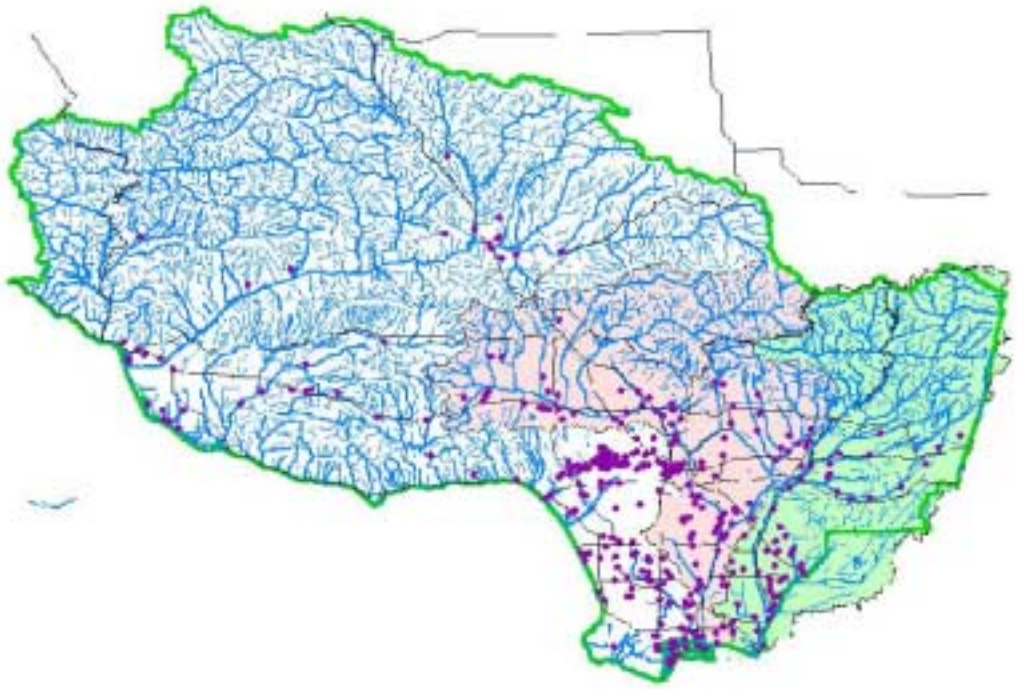
The Watershed Regulatory Section primarily operates under a watershed approach for scheduling the readoption of existing NPDES permits. For fiscal year 2000 - 2001, the targeted watershed was the Dominguez Channel.

In addition to the targeted watershed, the Watershed Regulatory section continued efforts from last fiscal year to complete the Los Angeles River permit updates and the San Gabriel River permits. Continuity between these watersheds was necessary because of the interconnectedness of the two systems. The watershed has numerous impairments that need be addressed in the NPDES permits, including ammonia, toxicity, algae and eutrophication, metals, PCB, and DDT. Total Maximum Daily Load development are currently scheduled to address these issues as follows:

- Trash – 1998/1999
- Nitrogen and effects – 2001/2002
- Metals – 2004/2005

Allocations of load will be determined for point (permitted) and non-point sources of these pollutants. The relative number and locations of the permitted facilities may be seen in figure 3 on the following page (San Gabriel River Watershed in green, Los Angeles River Watershed in pink).

Figure 3 - Permitted Facilities:



Core Regulatory Activities

While the watershed management activities focus on the target watershed for the year, the basic core regulatory activities within the other watersheds continue. We have continued our permitting efforts in the reduction of NPDES permit backlogs; increased general NPDES permits; permit improvements, and water reclamation.

NPDES permits are adopted for set periods of time and are considered backlogged once their expiration date passes. As we cycle through the WMA, some permits are allowed to expire so that they can be considered along with the other permits in their respective watershed. However, the permit holder is not placed in legal jeopardy since federal law states that the permits are administratively extended until the permitting authority, the Regional Board, acts on a permit renewal. For fiscal year 00/01, the NPDES workplan called for renewal of 18 major and 65 minor NPDES permits. Of these permits, all of the major permits were backlogged and there were 28 backlogged minor permits. The backlogged permits were scheduled for the previous workplan, but could not be adopted during that fiscal year.

During the 00/01 fiscal year, 9 NPDES permits for major dischargers and 34 NPDES permits for minor dischargers were updated and renewed, or converted to general permits, where appropriate. Significant among these were the permits for three power plants and two oil refineries. Additionally, seven other POTW permits and one other refinery permit were developed and agendized for Board consideration, but have been postponed to future board meetings. The remaining permits will be completed during the first quarter of FY 2001/02.

Municipal Permitting Unit

The Municipal Permitting Unit develops NPDES permits for discharges from Publicly Owned Treatment Works (POTWs) to surface water, as well as water reclamation requirements (WRRs) and waste discharge requirements (WDRs) for POTWs that also hold NPDES permits.

- **POTWs:** In preparation for the development of the tentative NPDES permits for the County Sanitation Districts of Los Angeles County, a template for POTW permits was created. This template included a new format with a table of contents and headings, and a detailed fact sheet with reasonable potential analysis table and limit calculation spreadsheet. Although the permits for the County Sanitation Districts of Los Angeles County have not been adopted, the template did aid in the development of tentative permits for other POTWs, such as the Ojai Valley Sanitation District's WWTP, the Ventura Regional Sanitation District's Fillmore WWTP and the only adopted POTW permit this fiscal year, the City of San Buenaventura's Ventura Water Reclamation Plant.

Industrial Permitting Unit

The Industrial Permitting unit writes or updates permits for non-POTW facilities, such as refineries, power plants, manufacturing, and other industries with discharges to surface waters within the region.

- **Power Plants:** Three major permits for generating stations were adopted during the fourth quarter of FY 2000-2001 which include Mandalay Beach, Long Beach and Ormond Beach generating stations.

  These generating stations are regulated under the Ocean Plan with approved dilution ratios. On February 8, 2001, the State and Regional Boards received the Governor's Executive Order D-22-01 concerning the California electricity supply shortage that requires all existing power plants to increase their generation output. The Governor's Executive Order provides, in part, that "power plants in the State of California are not precluded from operating as a result of thermal limits in waste discharge requirements." These permits are consistent with the Governor's Executive Order D-22-01 to responsibly address the energy emergency and are consistent with the objectives of environmental protection.

- **Refineries/Tank Farm:** Two major permits for refineries (Tosco and ARCO) were reissued with a number of modifications. The adopted permits provided flexibility per the SIP, including conditions and provisions for Board consideration of extended compliance schedules, mixing zones and dilution credits upon receipt of information adequately demonstrating to the satisfaction of the Regional Board that the permittees cannot feasibly comply with the California Toxics Rule (CTR) criterion or an effluent limitation based on criterion within time provided contained in the WDR. The permittees have made appropriate commitments to support and expedite TMDL development in the Dominguez Channel.

- **Minor Permits:** Our Regional Board renewed the NPDES permit for the Northrop Grumman Corporation Military Aircraft Systems Division, Newbury Park Facility (NPDES NO. CA0062588, CI-7093), on August 31, 2000, with the adoption of Order No. 00-126. This NPDES permit was the first in our Region to incorporate CTR and SIP requirements. It served as the basis for developing other industrial-type permits.

General Permit/Special Projects Unit

A facility that discharges wastes to surface waters usually is issued an individual point source NPDES permit. These permits take a number of months to process and may require a substantial investment in time and effort for both the discharger and the Regional Board. General NPDES permits enable Regional Board staff to expedite the processing of requirements for certain types of discharges, simplify the application process for dischargers, better utilize limited staff resources, and avoid the expense and time involved in repetitive public noticing, hearings, and permit adoptions. The use of the general permits not only expedited the permitting process for applicants that fell under one of the seven permit categories, but also allowed staff to dedicate more time to the complex issues of the individual permits. The categories and the number of permits issued in each category during the fiscal year are shown in Table 1.

Table 1. General Permits Issued

General Permit type	New	Revision	Termination
NPDES CAG994001 (Order No. 97-045) Dewatering (no treatment)	35	7	31
NPDES CAG994002 (Order No. 97-043) Dewatering (treatment required)	15	3	6
NPDES CAG674001 (Order No. 97-047) Hydrostatic Test Water	12	1	1
NPDES CAG994003 (Order No. 98-055) Nonprocess Wastewater (no treatment)	6	2	7
NPDES CAG834001 (Order No. 97-046) Cleanup of Petroleum Fuel Pollution	14	1	5
NPDES CAG834001 (Order No. 97-044) Cleanup of Volatile Organic Compounds Contaminated Groundwater	3	1	2
NPDES CAG834001 (Order No. 94-058)			1
Total	**85**	**15**	**53**

Permit Improvements

- **California Toxics Rule(CTR)/SIP Implementation:** The State Water Resources Control Board (SWRCB) adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (also known as the State Implementation Plan or SIP) on March 2, 2000. The SIP applies to discharges of toxic pollutants in the inland surface waters, enclosed bays and estuaries of California which are subject to regulation under the State's Porter-Cologne Water Quality Control Act and the Federal Clean Water Act (CWA). The CTR became effective on May 18, 2000. As a result, toxic pollutant limits are prescribed in the renewed NPDES permits to implement the CTR and Basin Plan. This required extensive training and changes to the permit development process.

- **Pretreatment:** The pretreatment program is an integral part of most of the NPDES permits for POTWs. The workplan called for the completion of ten pretreatment compliance audits and two pretreatment compliance inspections. Due to changes in the programs for many of the permittees, the workplan was modified. The actual accomplishments were seven pretreatment compliance audits and three pretreatment compliance inspections.

- **Biomonitoring:** In recent NPDES permits, the Regional Board required the discharger to monitor the receiving waters of the discharge using various methods that would demonstrate that the discharge is not degrading the chemical, physical, and biological integrity of the receiving waters. Bioassessment provides a tool by which to measure the health of the communities living within the stream by looking at population diversity, population composition, as well as physical habitat. The City of San Buenaventura's Ventura Water Reclamation Plant was the first NPDES permit to be adopted with a detailed bioassessment monitoring requirement. This language has been refined and included in other tentative permits. Regional Board staff, working in conjunction with California Department of Fish and Game, have developed this standardized language to be included in all future major NPDES permits, and minor permits where applicable. Bioassessment monitoring requirements are also being included in the municipal storm water permits.

- **Toxicity:** The existing toxicity language built into permits prior to this fiscal year did not adequately address frequency of toxic events or followup on analyses that showed toxicity. Toxicity requirements were reviewed in consultation with EPA Region 9 and several dischargers with long experience in toxicity testing. Toxicity language was refined for greater standardization for all dischargers. Also, a new requirement for accelerated testing was added so that when a single sample is determined to be toxic, the validity and persistence of that toxicity in the effluent can be determined by a period of more frequent testing. This additional element will determine if a toxicity reduction evaluation (TRE) or toxicity identification evaluation (TIE) is necessary or will be productive.

- **Fish Impingement:** Although the permit limitations have not changed much in the power plant renewals, the monitoring programs have been strengthened to add, among other things, fish impingement (organisms trapped on intake structures) monitoring, intake water monitoring, and biomonitoring. These requirements will add to our knowledge of the impacts of these facilities.

- **Waste Streams to POTWs** – Many of the industrial facilities that have received renewed NPDES permits have committed to sending certain problematic waste streams to sewage treatment plants. These waste streams include process wastes, low flow wastes (such as boiler blow-down), and stored storm water.

Water Reclamation

Most of the large wastewater treatment plants in our Region have been equipped with a tertiary treatment system which can produce water of quality readily usable for recycling. Of these, the Sanitation Districts of Los Angeles County currently shares a major role in this water recycling program, followed by the City of Los Angeles. The uses of reclaimed water have steadily increased over the past three decades. Uses for reclaimed water include groundwater injection and recharge projects; landscape irrigation; agricultural activities; industrial and construction applications; and enhancement of wildlife habitat. Board staff continues to search for new and beneficial uses for reclaimed water throughout the Region.

Some projects, however, have been temporarily halted because of concerns over emergent chemicals, such as N-nitrosodimethylamine (NDMA). Treatment processes to reduce or eliminate these pollutants are being evaluated.

Groundwater Division

ENFORCEMENT AND GROUNDWATER PERMITTING SECTION

This section was established in October 2000. Initial activities focused on the development of a section infrastructure, including hiring a section chief, a secretary, a unit chief for the Groundwater Permitting Unit, and to fill vacancies, as the section had a 40% vacancy rate. The section includes three Units, each with a distinct focus: Enforcement, Landfills, and Groundwater Permitting, plus a Contaminated Sediments Task Force Coordinator.

Enforcement Unit

The Regional Board has been granted the authority to implement and enforce water quality laws, regulations, policies and plans to protect the waters of the state by the Porter-Cologne Act. The goal of the Enforcement Unit is to enforce these laws by taking action in a fair, firm and consistent and timely manner in order to protecting the beneficial uses of waters of the State, ensure compliance with RWQCB regulations, plans, policies, and orders, protect the public health and the environment, and deter potential violators.

The Enforcement program has grown to a total of 7 positions with the addition of two positions to the unit this year. Region 4 is again, first among the nine Regional Boards in terms of numbers of enforcement actions being issued. Board staff typically pursues non-penalty administrative enforcement as a first effort to secure compliance. Two main administrative enforcement tools are used. First, Notices to Comply and second, Notices of Violation. The Enforcement Unit took the following informal and formal enforcement actions in fiscal year 2000/2001:

- Approximately 138 Notices to Comply and 301 Notices of Violation
- 91 Notices of Violation and 13267 letters were issued
- 21 Mandatory Minimum Penalties
- 12 Stormwater Annual Report ACLs
- 14 discretionary ACLs.

In addition, the Enforcement Unit is responsible for assisting the Watershed Regulatory Unit with NPDES facility inspections. In the past fiscal year, the Enforcement Unit inspected 139 NPDES facilities.

Migden Violations

Section 13385 (h) and (i) of the Water Code requires mandatory enforcement against dischargers who violate certain provisions in their NPDES Permits. In fiscal year 2000/2001, staff from the Enforcement Unit reviewed a total of 1,915 monitoring reports submitted by dischargers. About 42% of these were found to contain some deficiency requiring enforcement follow up. Several of these violations trigger immediate enforcement, requiring the Regional Board to issue an Administrative Civil Liability (ACL) or a Mandatory Minimum Penalty (MMP) and to provide the opportunity for a hearing on appeal before the Regional Board. In fiscal year 2000/2001, staff issued 21 Migden related ACLs and are currently processing several more ACLs for violations identified from monitoring reports.

Stormwater Enforcement

With the addition of a substantial number of new staff to create a fully formed Section devoted to stormwater, the Regional Board will be seeing a dramatic increase in the number of stormwater related enforcement cases. The Enforcement unit now has one staff person dedicated to stormwater enforcement, specifically issuing ACLs to dischargers who fail to submit annual reports (pursuant to section 13399.33 of the CWC) and, in the near future, non filers. The enforcement section has issued 12 ACLs in fiscal year 2000/2001. Annual Reports are an area of special concern, as the Regional Board is required, by section 13399.31 of the CWC, to identify dischargers who have failed to submit annual reports and to pursue enforcement on these violations.

Discretionary ACLs

Section 13385 (h) and (i) of the Water Code mandates that we take enforcement action on a specified category of violations. We have issued 14 discretionary ACLs in fiscal year 2000/2001and there are several fairly significant cases pending, e.g., Chevron, and others being developed.

The new enforcement hearing panel concept has streamlined our enforcement process. On June 15, we held our fourth hearing panel. Three cases were heard. The Hearing panels allow time for in depth discussion of factual matters relating to an enforcement case and allow for a much more expedited hearing before the full board which will need to make the final determination based, in part, on the recommendation of the hearing panel.

SEPs

Supplemental Environmental Projects (SEPs) have become a very useful tool for directing a portion of the penalty assessed by the Regional Board toward projects that have a benefit to the local watershed. A SEP can be directed to actual environmental restoration, a technical study, e.g., TMDLs, or for an educational program. There are 37 ACLs that have SEPs associated with them. Of these, only a few have been completed and most are in progress with some aspect of the SEP's workplan. The greatest challenge for Regional Board staff continues to be keeping up with the oversight responsibility once a SEP is proposed. As the number of ACLs that are issued increases, we can expect a corresponding increase in the number of SEPs.

Chapter 15/Landfills Unit

The purpose of the program is to protect surface and groundwater from the potential adverse affects of disposing waste to land. It is estimated that there are over 700 landfills in the Los Angeles Region. Of these, there are approximately 53 active waste discharge requirements for landfills or landfill associated activities. The Regional Boards works in conjunction with Integrated Waste Management Board, pursuant to Title 27, California Code of Regulations, to regulate landfill operations and closure activities in order to ensure that owner/operators are in compliance with State (Title 27 and Chapter 15) and Federal (Parts 257, 258 of 40CFR) regulations. The responsibility of the Regional Board staff extends from review of initial EIR's for proposed land disposal projects to post-closure maintenance and monitoring after a landfill ceases accepting waste.

In addition to the specific numerical commitments listed in the Chapter 15 workplan concerning waste discharge requirements (WDRs), inspections, discharger monitoring report (DMR) and

technical report reviews, the landfill unit responds to reports of illegal activities and disposal practices and takes appropriate enforcement actions for such activities and any violations of waste discharge requirements.

Fiscal Year 00/01 Accomplishments:

The main accomplishment was to nearly meet or exceed the requirements of the workplan without a fully staffed unit for the first six months of the year.

The three major categories identified in the workplan were issuance, review, and rescission of WDRs, DMR review, and inspections. The expected outputs for these three activities were 13 WDRs, 80 inspections, and 100 DMRs reviewed. Table 2 shows the progress of the Landfills Unit with respect to workplan requirements for the past fiscal year.

Table 2. Landfills Unit Accomplishments for FY 00/01:

	WDRs Adopted	No Action Required	General WDRs	Inspections	Monitoring Reports Reviewed
Workplan Commitment	13	N/A	N/A	80	100
Achieved	5	4	38	90	153

Three sites previously listed as backlogged were identified as not part of the Landfill program. In addition to the outputs discussed above, staff wrote and mailed 38 general WDRs for contaminated soil disposal. General Permits are not identified as a Chapter 15 commitment but are required to be issued in response to requests for disposal of specific waste streams to municipal solid waste landfills. Staff wrote revised tentative general WDRs for disposal of contaminated soil and other wastes to municipal solid waste landfills to reflect the experience gained in the nine years since the original WDR was written. As a result of extensive comments received at a public work shop held to discuss these tentative WDRs, staff postponed the tentative WDRs to FY 01/02.

Non-Chapter 15 Groundwater Permitting Unit

All wastewater discharges in the Region, whether to surface or groundwater, are subject to waste discharge requirements (WDRs). Likewise, all reuse of treated wastewater is subject to Water Reclamation Requirements (WRRs). The Non-Chapter 15 Unit handles the subset of WDRs and WRRs for discharges to groundwater subject to Section 13263 of the California Water Code. Non-Chapter 15 refers to all non-NPDES WDRs that are not land disposal WDRs (i.e., for wastewater originating from landfills, surface impoundments, waste piles and land treatment units, mines, and confined animal feedlots) and not subject to Chapter 15 of the California Code of Regulations (i.e., mining or landfills).

Though individual WDRs may be issued by the Non-Chapter 15 unit to a discharger, the Non-Chapter 15 unit may also permit a disposal activity by coverage under a General WDR, The General WDRs available for use by the Non-Chapter 15 Unit include the following:

- General WDR for private subsurface sewage disposal systems in areas where groundwater is used or may be used for domestic purposes (Order No. 91-94).

- General WDR for specified discharges to groundwater in Santa Clara River and Los Angeles River Basins (Order No., 93-10). This WDR can be used for hydrostatic testing of tanks, pipes, and storage vessels; construction dewatering; dust control application; water irrigation storage systems; subterranean seepage dewatering; well development and test pumping; aquifer testing; and monitoring well construction.

- General WDR for small commercial and multifamily residential subsurface sewage disposal systems (Order No. 01-031). This WDR was adopted this past fiscal year.

Fiscal Year 00/01 Accomplishments

Accomplishments for the past fiscal year include enrollment of several facilities under existing general WDRs, the adoption of a new general WDR, as well as individual WDR adoptions and renewals.

- **General WDR – Small Commercial and Multifamily Residential Subsurface Sewage Systems**: In the past fiscal year, the Groundwater permitting unit issued this new general permit for small commercial and multifamily sewage disposal systems with a maximum daily flow of 20,000 gallons or less. Staff developed an implementation plan including outreach, data inventory and case prioritization, inspection, enforcement, enrollment, and oversight. The Board enrolled two dischargers (Veterans of Foreign Wars of the U.S. and Rio Café) under the new permit in the past fiscal year.

- **General WDRs – Acton:** The Groundwater permitting unit enrolled seven cases under a general WDR, entitled General Waste Discharge Requirements (WDRs) for private subsurface sewage discharges from single residential housing developments (Order No. 91-94) for the Forecast Developers tract in the Acton community.

- **United Foods Incorporated:** The Board adopted revised WDRs and issued a Time Schedule Order (TSO) for United Foods, Incorporated (Pictsweet Mushroom Farm).

- **Chase Brothers Dairy:** The Board renewed the Waste Discharge Requirements (WDRs) for Chase Brothers Dairy (Order No. 01-069).

- **Septic Disposals in City of Malibu:** Staff issued 4 WDRs for dischargers in Malibu in the past fiscal year.

- **Halaco Engineering Company:** Staff continued to make progress in the development of tentative WDRs for Halaco Engineering Company Incorporated (Halaco). A tentative WDR was drafted in June 2000. Board staff discussed requirements of the tentative WDR and tentative Cease and Desist Order (CDO) and Halaco's comments at the June 28, 2001 Board meeting and will issue revised tentative WDRs in the next fiscal year.

Table 3. Groundwater Permitting Unit Accomplishments for FY 2000/2001:

Activity		Workplan Commitment	Completed
New Permits issued	Individual	-	12
	General	-	10
Permits rescinded		110	108
Inspections	Category 1A	5	6
	Category 1B	9	71
	Other	156	41
Monitoring reports	Received	350	-
	Reviewed	-	183

Contaminated Sediments Task Force

The Los Angeles Basin Contaminated Sediments Task Force was established in 1997 by the California Coastal Commission and the Los Angeles Regional Board pursuant to Senate Bill 673 and Water Code Section 13396.9. Los Angeles County includes two of the nation's largest commercial ports and several major marina complexes and small-vessel harbors. Periodic dredging is needed to maintain channels and berthing areas, and to expand and modernize ports and harbors. The dense human population and extensive urbanization of the Los Angeles area has led to the discharge of pollutants into our waterways from many sources. As a result, some of the sediments that need to be dredged from coastal areas contain high concentrations of heavy metals, pesticides, and other contaminants.

The Coastal Commission and the Regional Board are charged with developing a long-term management plan for the dredging and disposal of contaminated sediments found in coastal waters adjacent to Los Angeles County. The plan shall include identifiable goals for the purpose of minimizing impacts to water quality, fish and wildlife, through the management of contaminated sediments. The plan shall include measures to identify environmentally preferable, practicable disposal alternatives, promote multiuse disposal facilities and beneficial reuse, and support efforts for watershed management to control contaminants at their source. This plan must be submitted to the Legislature by January 1, 2003.

Over the past two and one-half years, the Task Force has developed a preliminary assessment of several upland and aquatic disposal alternatives for handling contaminated dredged material, as well as a preliminary evaluation of various treatment technologies that could allow beneficial re-use of contaminated sediments. The Task Force also has improved coordination between the regulatory agencies, the environmental community and the agencies responsible for conducting dredging projects.

Fiscal Year 00/01 Accomplishments:

Accomplishments include reviewing waste discharge requirements, conducting sediment studies and beneficial re-use studies, completing a status report, and continuing public outreach through workshops and dissemination of information.

- **Waste Discharge Application Review:** Regional Board staff continues to review Waste Discharge Applications and develop Tentative Waste Discharge Requirements for dredging projects for consideration and adoption by the Regional Board.

- **Special studies:** The Los Angeles Regional Board, on behalf of the Contaminated Sediments Task Force, was allocated $2,033,000 to conduct special studies over two years to address data gaps that will allow completion of the management plan. After entering into a contract with the Southern California Coastal Waters Research Project, two contract tasks were initiated during FY 2000/01: 1) compilation of sediment monitoring and stormwater data into an electronic database, and 2) collection and analysis of stormwater samples to evaluate polutant loadings from specific land uses.

- **Coordination of efforts:** The U.S. Army Corps of Engineers (COE) secured federal funds to develop a Dredged Material Management Plan for dredging and disposal of sediments in the Southern California region. The COE is working closely with the Contaminated Sediments Task Force to integrate the activities of both groups and avoid duplication of effort. The COE has dedicated approximately $3.75 million to conduct pilot projects to demonstrate the technical and economic feasibility of selected beneficial re-use (e.g., concrete stabilization, soil washing, blending) treatment techniques and aquatic disposal alternatives for contaminated sediments.

- **Issued a status report:** The Contaminated Sediments Task Force issued a Status Report to the Governor and the Legislature in July 2000, summarizing some of the accomplishments of the Task Force during 1999.

- **Annual public workshop:** On November 2, 1999, the Task Force held its second annual public workshop. Staff from the California Coastal Commission and Los Angeles Regional Board presented a brief description of the Task Force's goals, highlighted major success stories of the past year, and discussed major tasks to be accomplished during the next year.

- **Dissemination of information:** The Contaminated Sediments Task Force continues to disseminate information to interested parties through use of the Coastal Commission's website. Meeting announcements and summaries of past meetings, as well as background documents and information related to the Task Force, are available on the Internet at: http://www.ceres.ca.gov/coastalcomm/web/sediment/sdindex.html

Figure 4 – Dredging Activities Managed by the Contaminated Sediments Task Force:

STORM WATER SECTION

Pollutants mobilized by storm water constitute the greatest risk to beneficial uses in Region 4's surface waters. The Regional Board regulates discharges of storm water from over 3500 industrial and construction facilities, and 99 governmental entities as follows:

Table 4 - Regulated Facilities:

Regulated Community	Number of Dischargers in Region 4
Municipalities 86 in Los Angeles County 12 in Ventura County 1 CalTrans	99
Industrial – Los Angeles	2430
Industrial – Ventura	196
Construction – Los Angeles	713
Construction – Ventura	235

Fiscal Year 00/01 Accomplishments:

The storm water program focused its efforts on 3 key areas: building a storm water team, developing a risk based inspection program for facilities enrolled under General Permits for industrial facilities and construction sites, and providing outreach to the public, industry, and municipalities.

Building a Storm Water Team

Up until this current year, the Storm Water Program's budget supported fewer than 7 PYs, resulting in negligible field presence and compliance oversight. Additional funding allocated by the legislature last year has enabled the formation of a new Storm Water team, which now consists of 18 technical staff (including three Unit Chiefs and a Section Chief) and 2 administrative staff. Our addition of highly skilled administrative staff has greatly improved our ability to provide strong customer service, and to control backlog by promptly logging in and organizing the high volume of documents submitted by permittees.

The staff are structured into three Units, based on geography. This structure allows for maximum efficiency in the field; the structure also enables Regional Board staff to better integrate and coordinate our industrial and construction oversight with activities the municipalities are required to undertake under the MS4 permits.

Training of our new staff continues to be a priority. The Storm Water team has created standards and protocols for the conduct of inspections and created new forms that are needed to document field observations. Staff has been provided with essential training that allows them to understand their responsibilities and conduct field work safely and in a manner that is consistent from one site to another. Specific training events include:

- **Health and Safety training**

- **Urban Watershed BMP workshop:** The workshop provided comprehensive understanding of urban Best Management Practices (BMPs) required to meet regulations such as the SUSMPs (Standard Urban Storm Water Mitigation Plans) for Los Angeles County.

- **Industrial inspection training**

- **Field training session for construction site inspectors:** Regional Board staff from the Ventura Storm Water Unit participated in this session in which inspectors were led on a tour of several sites in Simi Valley, providing examples of good and bad practices commonly found. This training has enhanced understanding and cooperation between the Regional Board and Ventura County on construction site problems, and should greatly improve consistency among inspectors.

- **Brown bag lunches:** Associate and senior level staff took the initiative to lead several brown bag lunches regarding the "State of BMPs" observed in the field. Staff used this as an opportunity to learn about new approaches to preventing and controlling storm water pollution, and to compare observations on the effectiveness of various BMPs.

In addition to hiring, training, and overseeing staff, the Storm Water team has focused on developing procedures (e.g., NOTs), better tracking systems, and a GIS as part of the ramp-up program this past fiscal year. These efforts are ongoing.

Risk-Based Inspection Program

During 2000, the Office of the Inspector General (OIG) investigated Clean Water Act enforcement by states delegated by the US EPA to implement NPDES programs. For California, the auditors focused on Region 4's storm water program. Although the audit found that enforcement in the past could have been more effective, the report acknowledged Region 4's efforts to implement a risk-based inspection program over the past year and named it a "Best Practice" for improving total water quality. The risk-based plan targets industrial and construction inspections at the highest risk permittees, using specific criteria - such as administrative non-compliance, high-risk industrial sectors, large size of construction sites and timing of land disturbance, and complaints.

As part of this risk-based approach for industrial permittees, the Storm Water team focused on 800 industrial permittees in the heavily industrialized 110/Alameda/710 corridors. Staff evaluated monitoring data and compliance history to identify 200 facilities that presented the highest risk of discharging polluted runoff. Staff conducted in-depth compliance inspections, undertaking enforcement as appropriate. By the end of June, staff completed 251 (121%) of the targeted inspections.

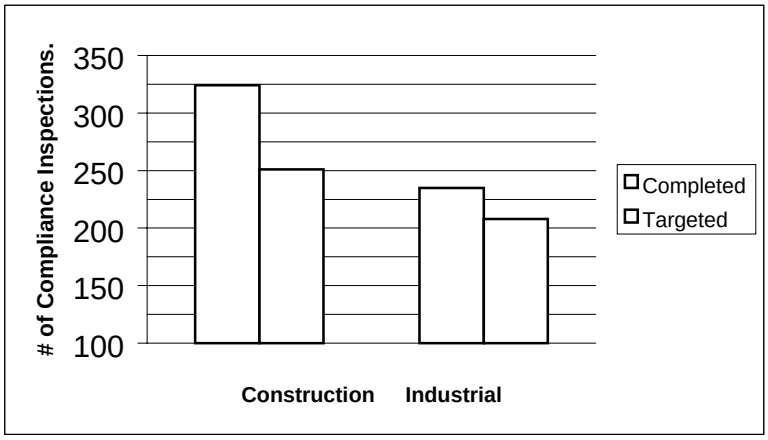
Northern Los Angeles and Ventura counties are currently experiencing high growth. Accordingly, the Storm Water team focused its construction inspections in these areas for the 00/01 fiscal year, increasing field presence from 5% 50%. The goal was to conduct in depth compliance inspections, including SWPPP reviews, of 25% of the construction sites, and to undertake enforcement as appropriate. By the end of June, staff completed 324 (138%) of the targeted inspections. The total compliance inspections for fiscal year 00/01 for industrial and construction sites are shown in the table below.

Table 5 - Compliance Inspections:

	Jul 1st through Dec 31st	Jan	Feb	Mar	Apr	May	Jun	YTD Total (% Target)	Target for 2000/2001
Construction	52	21	41	66	45	65	34	324 (138%)	235
Industrial	25	71	28	77	33	11	6	251 (121%)	208
Total	77	92	69	143	78	76	40	575 (130%)	443

In addition to the 575 compliance inspections at the end of June, staff completed 500 other types of inspections, including inspections for NOT (Notice of Termination) applications, follow-up inspections, enforcement and complaint inspections.

Figure 5 – Storm Water Inspection Graph:



Outreach

Over the long term, the Storm Water team's goals are to effect behavioral changes on the part of businesses, municipalities, and residents to reduce pollutant loads in storm water. To that end, the team has conducted a variety of outreach efforts, including automating the storm water hotline, enhancing "Storm Report" newsletters, designing a new web page, and sponsoring workshops aimed at educating the regulated community.

The automated Storm Water Hotline and Voicemail System (213-576-6753) has been positively received. The hotline provides information based on call history and frequently asked questions. Callers have the option to leave a message at any time or to be forwarded to appropriate staff for specific municipal permits.

The new web page has many features, including staff contacts; a comprehensive (and easy to find) list of documents related to adoption of SUSMPs; the ability to download "Storm Report" newsletters, general storm water permits, municipal permits for the County of Ventura, County of LA, City of Long Beach, and CalTrans; and links to other storm water web sites, including sites

with weather forecasts and locations of rain gauges in LA County, along with historical rainfall data. Staff are working on adding more features, such as historical rainfall data for Ventura County.

The Regional Board sponsored numerous outreach workshops in the past fiscal year including the following:

- **Storm Water Issues Forum:** The forum was held in October to discuss industrial storm water requirements, compliance expectations, and to ensure that industrial facilities would take all necessary actions to protect water quality and comply with storm water permits. The forum was open to all permittees and interested parties; however, the primary intent was for consultants and laboratory managers to learn about what they need to do to properly advise their clients on industrial storm water requirements.

- **Construction Storm Water Permit Seminars:** The Storm Water Program staff co-hosted three seminars in December, April, and July in cooperation with the Ventura Countywide Storm Water Quality Management Program, to educate and inform inspectors, contractors, developers, engineers, landscape architects and other building industry professionals in Ventura County. Both Ventura County and LA County developers and inspectors were included in this training. At the seminar staff discussed the requirements of the statewide General Construction Storm Water Permit and explained the Regional Board's progressive enforcement policy. See Figure 6 for an example of a construction BMP demonstrated at these seminars.

- **Staff Presentations:** Storm Water staff have given more than 20 speeches, presentations, and workshops for permittees, consultants, trade groups, professional associations, environmental groups, city and county staff members, and federal and state agencies. Topics included general permit compliance requirements, development planning standards (i.e. SUSUMPs), BMPs, sustainable development, monitoring requirements and protocol, and wastewater technology.

Figure 6 – a) Construction Activities With Uncontrolled Construction Runoff and b) BMP Demonstrated at a Regional Board Training/Outreach Seminar:

a) **b)**

REMEDIATION SECTION

Substantially all of the Region's local supplies of fresh water are in groundwater basins. While the quality of groundwater, in general, remains high, there is significant contamination in portions of the Region's groundwater basins, requiring regulatory direction and oversight in order to contain the contamination and ensure an appropriate level of cleanup. Thirty full-time staff plus student interns work in this Section's three units. There are six programs in the units, as shown below:

San Fernando and San Gabriel Cleanup Unit (Well Investigation Program)

- San Fernando Valley Projects
- San Gabriel Valley Projects

Site Cleanup Units I and II

- Spills, Leaks, Investigations, Cleanup (SLIC) Program
- Aboveground Storage Tanks Program
- Department of Defense Program
- Redevelopment Agency Program

San Fernando and San Gabriel Cleanup Unit/ Well Investigation Program (WIP)

The Well Investigation Program (WIP) determines the source(s) of chlorinated volatile organic compound (VOC), heavy metal, and emergent chemical contamination in the soil and groundwater in San Fernando, San Gabriel, and Pomona Valleys. The Well Investigation Program has separate Cooperative Agreements with the United States Environmental Protection Agency (USEPA) covering the San Fernando and San Gabriel Valley Superfund areas. Although most of the program's work targets impacted sites within six operable units in San Fernando Valley and eight operable units in San Gabriel Valley using Federal Superfund funding, some State source identification, site assessment and cleanup work are performed outside these Superfund Operable Units under General/Cost Recovery Funding. Activities are coordinated with USEPA and other regulatory agencies.

Fiscal Year 00/01 Accomplishments:

Accomplishments include performing site inspections and environmental assessments at Superfund and Non-Superfund sites in San Gabriel and San Fernando Valleys and issuing cleanup and abatement orders and enforcement actions as needed.

San Gabriel Valley Projects

Superfund Sites

- **Baldwin Park Operable Unit (BPOU):** Four Cleanup and Abatement Orders were issued to Asher Engineering, Azusa Pipe & Bending, Hartwell and Fairchild Industries. These orders reflect the Regional Board's continued enforcement action emphasis geared to ensuring vadose zone cleanup within the BPOU. Co-ordination continues with USEPA and the Main San Gabriel Valley Watermaster on regional groundwater

contamination issues that focus on the following emergent chemicals; ammonium perchlorate, N-Nitrosodimethylamine (NDMA) and 1,4-dioxane.

- **Alhambra Operable Unit (AOU):** Site inspections and environmental assessments continue. Over 100 Chemical use questionnaires have been sent out to dischargers in the area. Chlorinated volatile organic compounds (VOCs) have impacted six drinking water wells belonging to the City of Alhambra. Regional Board staff are assisting USEPA with source identification.

- **Puente Valley Operable Unit (PVOU):** Three sites within the City of Industry have been granted "no further action" status, meaning that assessment and/or soil cleanup issues have been resolved. All are still liable for groundwater cleanup under Superfund.

- **South El Monte Operable Unit (SEMOU):** Within this area, several drinking water wells have been contaminated by VOCs, which threaten their continued operation to serve nearby communities. Regional Board staff is continuing to assist USEPA with unresolved VOC source identification problems to formulate a groundwater cleanup strategy.

  In addition, the Regional Board has initiated two separate contracts with the Metropolitan Water District of Southern California (MWD) and the San Gabriel Basin Water Quality Authority (WQA) for the investigation of chromium and chlorinated impacted sites. Regional Board completed over 25 site assessments in the past fiscal year.

  Non-Superfund Sites

- **Monrovia:** The former Alcoa/Carrier Corporation has been directed by staff to locate the source(s) of high concentrations of VOCs detected in some onsite and offsite groundwater monitoring wells. Past soil and groundwater assessment data suggest significant impact.

- **Pomona:** Regional Board staff has begun to address unresolved source identification issues in La Verne and in Pomona. In some localized areas, petroleum hydrocarbons and chlorinated VOCs have impacted the soil and groundwater.

San Fernando Valley Projects

- **Chromium Contamination:** The Regional Board and USEPA extended a cooperative agreement to identify sources of chromium contamination that have contaminated water supply wells in the San Fernando Valley Superfund area. On November 8, 2000, Regional Board staff mailed-out 172 letters to businesses previously investigated under Superfund, soliciting additional information on their chromium usage and disposal practices. Notices of Violation (NOVs) were sent out on March 9, 2001 to companies that did not respond to the chemical use questionnaires and compliance with the NOVs is 70%. Enforcement actions will continue against non-respondents and against companies where significant chromium VI contamination has been documented.

  In addition, Regional Board staff cooperated with other agencies to obtain additional chromium VI information outside Superfund areas. Staff has developed a database of historic and currently regulated facilities in the area based on this information and has identified 254 potential chromium VI sites.

  By the end of June, Regional Board staff had inspected 90 of 254 suspected chromium VI sites in San Fernando Valley. It is estimated that by September 2001, 73 more identified sites will be inspected. The 91 remaining sites require current property owner

information. Staff is assisting Los Angeles County officials in an effort to identify these property owners.

Staff has also joined the Chromium Task Force Committee consisting of the Upper Los Angeles River Area Watermaster, Department of Water and Power, Cities of Burbank and Glendale, Department of Health Services (DHS), Department of Toxic Substances and Control (DTSC), and USEPA. The Chromium Task Force Committee meets regularly to review and discuss such items as the progress of chromium contamination, new cleanup technologies for chromium, and laboratory methods.

Finally, the Regional Board held a special workshop to consider chromium VI groundwater contamination on November 13, 2000. The Board received testimony from academia, elected officials, regulatory agencies, affected businesses and the general public on the chromium VI groundwater problem in San Fernando Valley.

- **Verdugo Basin:** Another source identification program was initiated in the Verdugo Basin through a cooperative agreement with USEPA. The Verdugo Basin is located in the eastern portion of the San Fernando Valley. The goal of this program is to locate and eliminate sources of volatile organic compounds (VOC) and metal contamination that have impacted area supply wells. Regional Board staff has completed gathering facility data from other agencies and is using the facility information to generate GIS maps to identify potential sources and their locations relative to the water supply wells. Currently, priorities are being set to determine the sites for inspection. Staff has begun inspections.

- **NASA-Jet Propulsion Laboratory:** The Regional Board, USEPA, and the DTSC jointly oversee the assessment and cleanup of the NASA-Jet Propulsion Laboratory (NASA-JPL) site in Pasadena. The site is used by the California Institute of Technology to perform research and development under contract with NASA. Perchlorate and VOCs are the primary chemicals of concern at the site. Perchlorate is a recently detected inorganic compound associated with rocket fuel. Due to the contamination, some supply wells have been shutdown and groundwater treatment of the VOCs is required.

  A coordinating team has been formed and efforts are centered on determining the best way to treat perchlorate in a cost-effective manner. Currently, a long-term soil vapor extraction pilot test is being conducted to test the feasibility of remediating on-site VOC sources. Preliminary data collected during the soil vapor extraction pilot test indicate that it is a feasible cleanup method.

- **Heavy Metal Remediation on the Former Lockheed Martin Plant B-1 Site:** Regional Board staff is overseeing the assessment and cleanup of the Lockheed Martin Plant A-1 North site in Burbank. On April 2, 2001, a dry well was decommissioned where chromium VI had been detected. The analysis of the post-excavation soil samples detected elevated concentrations of cadmium (1,100 mg/kg) and total chromium (600 mg/kg). chromium VI was not detected in the soil samples. However, elevated concentrations of total chromium (24,000 mg/kg), hexavalent chromium (2,100 mg/kg) and cadmium (640 mg/kg) was detected in a sample of the material recovered from a stand pipe found inside the dry well. These concentrations exceed the California Code of Regulations (CCR) Title 22 Total Threshold Limit Concentrations (TTLC) for each constituent. Additional soil remediation will therefore be required.

Site Cleanup Units I & II

The Site Cleanup Units provide regulatory oversight for the assessment and cleanup of industrial facilities impacting the water quality of the State through four programs, the Spills, Leaks, Investigations, and Cleanup Program, the Aboveground Petroleum Storage Tanks program, the Department of Defense Program, and the Redevelopment Agency program. The four programs cover all types of pollutants such as solvents, petroleum fuels, and heavy metals, and all environments including surface and ground waters and the soil. The programs get their resources from general funds and through cost recovery agreements (i.e. the responsible parties are required to reimburse the Regional Board for oversight costs).

Fiscal Year 00/01 Accomplishments:

The four programs provided oversight assessment and cleanup work on 555 cost recovery and non-cost recovery sites, issued No Further Action or closure letters, reviewed and updated Cleanup and Abatement Orders (CAOs), and participated in 4 Spills, Leaks, Investigations, and Cleanup Program, 4 aboveground petroleum storage tanks, and 6 Department of Defense Program sites roundtable meetings.

Spills, Leaks, Investigations, and Cleanups (SLIC) Program

The SLIC Program focuses on both surface and groundwater. Sites are identified through investigations of contaminated drinking water wells, public complaints, routine environmental sampling, referrals from other agencies, real estate transactions, and disclosures from the dischargers. Under Water Code Section 13267, RWQCBs require responsible parties to provide technical reports on investigations of discharges and threatened release of toxic pollutants. Under Water Code Section 13304, RWQCBs issue orders to responsible parties to require cleanup and abatement of water pollution and contaminated soils threatening waters of the state.

- **Blue Line Project:** Regional Board Executive Officer and Regional Board Staff met with the Blue Line construction Authority on Monday April 2, 2001. The topics of discussion included the environmental survey of the route, review of investigation and remediation reports, storm water permit, NPDES permit, and general management of the project. The project is currently being handled by the Cost Recovery Program.

- **W. W Henry site:** On April 11, 2001, a cleanup and abatement order (CAO) was issued to W. W. Henry to immediately start the free product removal and soil vapor extraction for the Toluene free product plume detected in 1998 at the site. As of June, approximately 860 gallons or 5,077 pounds of toluene free product has been removed. The revised CAO was issued on June 15, 2001, specifying time frames to investigate volatile organic compounds in the soil, groundwater and air, implementing remedial actions, and conducting air and groundwater monitoring programs. A SVE and thermal oxidizer system started in June to mitigate the portion of the site where free product was detected.

- **Barkens Hard Chrome Inc. – Chromium Investigation:** In response to the hexavalent chromium (Cr^{+6}) contamination discovered by Alameda Corridor Transportation Authority (ACTA) during their construction, the Executive Officer sent a 13267 letter to Barkens Hard Chrome Inc. in Compton in March 2000, directing the investigation of Cr^{+6} contaminated soil and groundwater at the site. Cr^{+6} was detected in unsaturated soil samples and in groundwater and Tetrachloroethene (PCE) was detected in unsaturated soil and in groundwater. The Regional Board is currently requiring the owner to submit a workplan by February 23, 2001 for further delineation of soil and groundwater plumes.

- **Chromium and Solvent Cleanup at Boeing Long Beach C-1 Facility:** Investigations have revealed three distinct groundwater contaminant plumes at the C-1 aircraft manufacturing facility in Long Beach: 1) Trichloroethene (TCE) and methylene chloride at Building 10; 2) Jet fuel; and 3) Tetrachloroethene (PCE) and hexavalent chromium (Cr+6) at Building 5. From November 2000 through January 2001, Staff approved three work plans for additional characterization of volatile organic compounds (VOCs) and hexavalent chromium (Cr+6) contaminated groundwater and a work plan for a pilot test to evaluate hexavalent chromium (Cr+6) remediation. The results of this pilot test show that addition of a dilute mixture of calcium polysulfide is effective at reducing hexavalent chromium (Cr+6) in the underlying groundwater. Additional water quality samples will be collected and analyzed to evaluate the effect of this test on the commingled VOCs also present at this location of the site.

Figure 7 – Site Undergoing Cleanup as Part of SLIC Cost Recovery Program:

Aboveground Storage Tanks Program

Our Region has many of the largest aboveground storage tanks (AST) facilities in the nation. All of the major refineries are located within this Regional Board's jurisdiction, where billions of gallons of oil are being processed and stored in ASTs. There are more than 364 registered AST sites in Los Angeles and Ventura County. Oil spills and leaks from ASTs are significant due to the amount of petroleum and refined products being handled. The AST program addresses threats to groundwater from AST facilities in the Region. Mandated responsibilities of this program include compliance inspections of aboveground tanks.

- **Cases:** 61 cases were under assessment and/or remediation during the past fiscal year. 14 refineries are currently under the cost recovery program for cleanup of contaminants. More than 36 small AST sites were closed during the past fiscal year under the cost recovery program.

- **Oil Refineries:** In March 2001, letters were sent to the eleven major refineries under the Regional Board's jurisdiction (Mobil Torrance Refinery, Chevron El Segundo Refinery, Arco Los Angeles Refinery, Equilon Carson Terminal, Equilon Los Angeles Refinery, Edington Oil Refinery, Tosco Los Angeles Refinery, Ultramar Refinery, Powerine Oil Refinery, Paramount Refinery, and Tosco Carson Refinery), requiring them to submit an update of their progress toward fulfilling the provisions of Cleanup and Abatement Order (CAO) No. 85-017, issued to them in 1985, and revisions to that Order. These reports have been submitted and are currently under review by staff to determine if existing CAOs may be modified to be consistent and more focused on expedited cleanup.

- **Enforcement actions and Waste Discharge Requirements:** Staff completed over 150 AST CUPA follow-up inspections that we committed to performing during FY 200-2001 and issued 87 non-compliance enforcement letters to AST facility owners.

- **Spill Response:** The spill response team cover emergency spills twenty-four hours a day, seven days per week. Staff responded to 103 surface water spill complaints issued through the Office of Emergency Response during the last fiscal year.

Department of Defense (DOD) Program

The DOD Program provides regulatory oversight of DOD's Environmental Restoration Program (DERP). The DERP addresses the military facilities that are polluting or threatening to pollute water quality. Funding for the DOD Program comes from the DOD/State Memorandum of Agreement (DSMOA). Our Region's DOD Program is made up of 14 military facilities of the DSMOA and two military facilities that have been removed from the DSMOA and put into the DOD Cost Recovery Pilot Project.

- **Record of Decision at the Long Beach Naval Complex:** The Navy performed the investigation and remediation of various Areas of Concern with oversight by the Department of Toxic Substance Control (DTSC) and the Regional Board in 1999 at their Long Beach Naval Complex. The contaminants of concern at these sites include chlorinated and non-chlorinated volatile organic compounds, total petroleum hydrocarbons, polychlorinated biphenyls (PCBs) and metals. In February 2001, the RWQCB issued eight no further action letters for six AOCs and nine different structures located on the Long Beach Naval Complex.

- **Naval Construction Battalion Center, Port Hueneme (CBCPH):** In September, 2000, the Navy began a multi-year, MTBE treatment technology demonstration at the Naval Construction Battalion's MTBE plume as part of the USEPA's MTBE Technology Demonstration Project. Up to six MTBE technologies will be evaluated at CBCPH for cost and performance during the next two years. The pilot treatment system, which uses bacteria, oxygen, and air to treat the MTBE, is expected to operate for about three years. The Regional Board will be involved in permitting all research projects that include injection of materials into the groundwater.

- **Norwalk Tank Farm Restoration Advisory Board (RAB) Activities:** The quarterly Defense Fuel Support Point (DFSP) Norwalk Tank Farm Restoration Advisory Board (RAB) meeting was held on October 26, 2000. The attendees at the community meeting included the Mayor of Norwalk, a representative from Congresswoman Grace F. Napolitano's office, various military representatives, community members, and various other interested parties. The purpose of the RAB is to promote community awareness and obtain constructive community review and comment on proposed environmental

restoration actions to accelerate the cleanup at the fuel storage and transfer facility. The primary chemicals of concern are petroleum hydrocarbons (fuel products), 1,2-dichloroethane (1,2-DCA), benzene and methyl tertiary butyl ether (MTBE). Interest on the ongoing cleanup activities at the Norwalk Tank Farm continues to grow as the closure date of the Tank Farm nears. The military is scheduled to cease operations at the Norwalk Tank Farm by December 2000.

Redevelopment Agency (RA) Program

The RA Program provides regulatory oversight for the assessment and cleanup of city-owned sites that are being redeveloped. Funding for the RA Program comes from cost recovery agreements between the Regional Board and individual city redevelopment agencies. There are currently 21 RA projects in the region. We have the largest RA Program in the State. The Program has a very successful track record. There are currently 11 active sites. The Redevelopment Agencies are cooperative and are in compliance with our requirements.

- **Site development**. Two sites have been closed through the last fiscal year. Some of these sites either have been developed or are being developed. Six sites are undergoing site assessment activities. Three sites are implementing remedial action plans. One site is performing post remediation groundwater monitoring.

Table 6 – Total Site Cleanup Program Commitments - Fiscal Year 00/01:

	Activities	Annual Commitments	No. Completed to Date	% Completed
SLIC/RA Program	Closure	20	19	95%
	Inspection	360	393	109%
Aboveground Tanks (AGT)	Closure	45	121	269%
	Inspection	150	182	121%
Department of Defense (DOD)	Closure	20	23	115%
	Inspection	18	26	144%

UNDERGROUND STORAGE TANKS SECTION

This Section includes three Units which focus on addressing issues related to leaking Underground Storage Tanks (UST's) within the Los Angeles River Watershed, San Gabriel River Watershed, and the Los Angeles Coastal/Santa Clara River/Ventura County Watershed areas. This section provides assistance/directives to UST owners/operators throughout the site assessment, monitoring, cleanup, and closure process. Staff perform regular duties including:

- Issuance of work directive and workplan approval letters (hydrogeologic assessment and cleanup) to responsible parties
- Informal and formal enforcement actions
- Review and evaluation of quarterly groundwater monitoring reports
- Field inspections for site assessment, periodic groundwater quality monitoring, and cleanup actions

The goal of the UST program activities is to move active UST cases through the site assessment, monitoring, and cleanup phases towards a lower-risk and closure in the shortest feasible amount of time. Table 1 contains information by unit related to the number of open UST cases, new UST case referred to the Regional Board, UST cases closed, and numerical outputs for work directives issued, workplans approved, enforcement actions taken, other correspondence letters issued, and site inspections completed.

Table 7 – UST Program Output

Unit	New Cases	Cases Closed	Workplan Directives Issued	Workplans Approved	Enforcement Actions*	Other Letters Issued	Site Inspections Completed
Los Angeles Coastal Watershed	26	12	209	146	48	191	110
Los Angeles River Watershed	29	17	183	114	117	137	189
San Gabriel River Watershed	32	34	256	229	71	49	128
Total	87	63	648	489	236	377	427

* Enforcement Actions include 13267 letters, NOV's, ACL's, & CAO's

Fiscal Year 00/01 Accomplishments:

The UST Program focused on expediting the approval of the Arcadia Wellfield groundwater treatment system, pursuing site assessment cleanup activities within the Charnock Sub-basin, implementation of a MTBE investigation program in the San Fernando Valley Groundwater Basin, issuing quarterly MTBE reports, updating GIS capabilities, and updating the Leaking Underground Storage Tank Information System (LUSTIS) database to the GEIMS / Geotracker system.

MTBE Cleanup at the City of Santa Monica Arcadia Wellfield

In the vicinity of the Santa Monica Arcadia Wellfield, three aquifers were impacted by MTBE contamination. Two groundwater aquifers, the shallow aquifer and the production aquifer are located north of the Brentwood fault; the lower aquifer is located south of the fault. Cleanup plans submitted by ExxonMobil Corporation have been approved and implemented. Specific accomplishments include:

- **PARS operation.** A Production Aquifer Remediation System (PARS), using activated carbon filtering to clean up the production aquifer, has been in operation since May 17, 2000. Currently groundwater from Arcadia Well No. 5 is being pumped at 300 gallons per minute and discharged to a storm drain. As of June 15, 2001, PARS has pumped approximately 129.3 million gallons of groundwater and removed 0.51 pounds of MTBE. The average daily influent concentration of MTBE has decreased from approximately 86 µg/L to 0.12 µg/L.

- **PARS demonstration test**. A spiking demonstration test designed to evaluate system reliability and effectiveness has been completed. Mobil is completing the demonstration project report summarizing the result of spiking demonstration test to the State Department of Health Service (SDHS). After the PARS has been permitted to operate by the SDHS, and after a public hearing tentatively scheduled during summer of 2001, the treated water from Arcadia Well No. 5 will be routed to the City of Santa Monica treatment plant for distribution to the public.

- **Aquifer treatment.** The shallow aquifer and lower aquifer in the vicinity of the former Mobil Station 18-LDM continues to be treated with a pump and treat system since October 1997. As of June 15, 2001, the treatment system has pumped 20.83 million gallons of groundwater, removing an estimated 79.8 pounds of total petroleum hydrocarbons and 208.8 pounds of MTBE. The average MTBE concentration in the combined influent has decreased from over 2,000 µg/L in 1998 to 55 µg/L in 2001.

- **Treatment of soil.** The impacted soil in the vadose zone continues to be treated with a vapor extraction system (VES). The cumulative mass removed is approximately 12,600 pounds of gasoline hydrocarbons since May 1999. The VES has been expanded and connected to two wells in the lower aquifer.

MTBE Investigation of the Charnock Sub-Basin Investigation Area

The Charnock Sub-Basin lies to the south of the Arcadia Wellfield and contains two wellfields in close proximity to each other. The City of Santa Monica operates one wellfield while the Southern California Water Company operates the second. The wells operated by the City of Santa Monica have been off-line due to the detection of MTBE contamination since July 1996. MTBE has not been detected in the Southern California Water Company's wells. However, they were shut down during October 1996 to avoid potential spreading of the MTBE plumes.

The Regional Board and USEPA (Agencies) have been coordinating investigations and site cleanup activities within the Charnock Sub-Basin Investigation Area. The sources of MTBE in groundwater are the result of releases from underground gasoline storage tank systems. Since June 1997, the Agencies have been directing site assessment work at up to 48 separate potential responsible party (PRP) sites. At present, there are 27 active sites in the Charnock Sub-Basin Investigation Area. Of the 27 active sites, there are 12 sites where additional site assessment work is required. Groundwater monitoring is being performed at 26 sites. A workplan for site assessment is is currently prepared for the 27th site. Remedial action workplans for the soil and/or groundwater have been approved for a total of 9 sites. A total of 10 sites have approved

remediation workplans for the cleanup of the soil and/or groundwater. Specific accomplishments include:

- **Stipulated agreement:** A Stipulated Agreement between the Regional Board and Shell was developed, requiring Shell to perform regional investigation and analysis of alternatives for both Interim Water Replacement and Interim Regional Response Actions. This work will require development of a basin-wide flow model, development of a GIS database, evaluation of alternate drinking water sources within the Charnock Sub-Basin, evaluation of methods of treating polluted groundwater and restoring the Charnock Sub-Basin Investigation Area to its full beneficial use, and providing a community relations plan. The work specified in the SOW is a necessary step to restore the drinking water supply at the Charnock Wellfields.

  Currently, fieldwork is ongoing, and twenty-one (21) regional wells have been completed to date. Shell submitted preliminary basin-wide groundwater flow model in January 2001 and the model is currently under review by the Agencies. All 26 sites in the Charnock Sub-Basin have been required to submit the site-specific water quality data for construction of GIS database. As of May 30, 2001, 22 sites have submitted the data and 4 sites are either under preparation or will be directed to meet the requirement. Regional Board and USEPA (Agencies) have also established an inquiry hotline in response to the community concerns regarding the drilling and sampling activities required by the agencies. So far several dozen phone calls have been received by the hotline for inquiries. Regional Board and USEPA staff respond to all calls in a timely manner.

- **Cleanup and Abatement Order:** On December 11, 2000, the Regional Board issued a Cleanup and Abatement Order CAO-00-160 to Chevron U.S.A. Incorporated, Thrifty Oil Co, and Best California Gas Ltd. (Chevron/Thrifty/Best) for PRP Site No. 23. The Order requires Chevron/Thrifty/Best to perform supplemental hydrogeologic investigations onsite and offsite between the site and the Charnock Wellfield, and to complete onsite and offsite soil and groundwater cleanup per the schedule set forth in the Order. Chevron/Thrifty/Best has completed the remedial soil excavation, submitted a tank removal report, and is installing 14 offsite groundwater monitoring well clusters between the site and the Charnock Wellfield.

San Fernando Groundwater Basin Program

The State Department of Health Services reported that MTBE was detected at wells operated by the City of Los Angeles Department of Water and Power (LADWP) Tujunga Wellfield, Burbank Operable Unit, and North Hollywood Well No. 17 and Verdugo Well No. 1 and 2 in the San Fernando Valley Basin between 1997 and 1998. The Regional Board decided to investigate potential source(s) of the MTBE detected at these wells within a one mile radius of each wellfield, and in December 1999, staff issued initial information request letters to potential responsible party's sites. The following is an update on the contaminated sites:

- **Tujunga Wellfield**: After extensions and several enforcement letters, all parties responded to the information requests. A review of site specific data indicated that several sites had low levels of MTBE detected in near surface soil samples collected from shallow test borings. However, because of the distance to the Tujunga wells from the potential sources, the depth to groundwater, and the fact that there has been no detection of MTBE since the initial detection, the Regional Board's investigation is being placed in abeyance. No Further Action Letters were issued in April 2001.

- **Burbank Operable Unit:** MTBE was detected in the Burbank Operable Unit (BOU) in December 1998 and January 1999. The City of Burbank stated that trace concentrations of MTBE were detected from the combined influent stream from the wells and recirculated flow from the air stripper regeneration process, Tank 600. Board staff reviewed laboratory data provided by the City of Burbank that documents MTBE levels form eight extraction wells at less than detectable levels. Furthermore, the City of Burbank eliminated the recirculated flow from the influent from the treatment process and there have been no detections of MTBE at the BOU since. Staff's investigation is therefore being placed in abeyance and No Further Action letters have been prepared.

- **North Hollywood Well No. 17 and Verdugo Well No. 1 and 2:** After issuing No Further Action letters for the Burbank Operable Unit, staff will be performing a detailed review of information for the North Holly wood and Verdugo Wellfield areas to determine the potential source(s) of MTBE detected and the need to perform follow-up investigations.

MTBE Data Analysis Reports

California Senate Bill Number 521 (1997) requires further study and evaluation of impacts from methyl tertiary butyl ether (MTBE) on public health and the environment. As part of the Regional Board's ongoing efforts to further evaluate MTBE impacts on the environment during this fiscal year, Regional Board staff have summarized, evaluated, and analyzed data collected at leaking UST sites within this Region.

UST Staff have generated four reports to evaluate MTBE impacts including two reports containing the results from MTBE plume length studies; one report containing the results from a transport modeling study for MTBE soil cleanup levels; and a compiled report summarizing MTBE concentration distribution in groundwater, MTBE horizontal and vertical plume length studies, and MTBE fate and transport in the vadose zone. These reports represent our commitment to bringing our data and understanding regarding MTBE to the scientific community and the public.

In addition, available hydrogeologic and groundwater monitoring data is being used in a model effort to estimate MTBE plume length. The model format is furnished in a computer spreadsheet and user-friendly format. UST Program staff are currently evaluating the possibility of using the spreadsheet model as a regular tool for UST staff to estimate MTBE plume length during the site assessment, remediation, and case closure review process. MTBE data analysis and any other activities to support implementation of the tasks specified in the Governor's Executive Order D-5-99 will continue during this fiscal year.

Geographic Information System (GIS) Capabilities

The use of GIS has become an integral part of the case review process in the UST Program. Staff have significantly improved the spatial accuracy of the production well database provided by DHS. Well databases obtained from LADWP, LACDPW, Ventura County, Water Replenishment District of Southern California, and other local agencies were used to enhance the spatial data provided by DHS. In addition, staff has obtained a well database from LACDHS that indicates the locations of water systems that have less than 200 connections and integrated these wells into our GIS. In addition, the following progress has been made:

- **Case review prioritization scheme:** In response to the Final Draft MTBE Guidelines (March 30, 2000), a new case review prioritization scheme has been implemented to focus efforts on UST sites that are closest to potential receptors, such as drinking water supply wells and surface water bodies.

- **Vulnerability criteria:** GIS was used to map the final three vulnerability criteria outlined in the Governors Executive Order D-5-99. These were areas above fractured bedrock, above a groundwater aquifer, or within 1000 feet of a production well. This review process will be continued for sites that are progressively further from a receptor (i.e., greater than 1,000 feet and less than 3,000 feet, etc.).

- **Site maps:** Individual site maps have been created for active UST cases under the oversight of the Regional Board. These maps indicate the site's proximity to any active production wells, surface water bodies, groundwater recharge areas, and other UST sites to assist in the case review process.

- **Other maps:** Area-wide and specific city maps were created for UST cases under the oversight of the fifteen other local agencies within the Los Angeles Region Board area. Within the local agency jurisdiction, these maps identify active and closed UST cases, the site's proximity to any active production wells, surface water bodies, and groundwater recharge areas to assist them in managing their UST cases.

- **Addition of Other Regional Program Sites:** Staff has incorporated facilities from other Groundwater Division Programs into the UST GIS database. Approximately two-thirds of the sites from the Site Cleanup I and II Units have been address-matched. In addition, current and former landfills have also been manually digitized and will be incorporated into the Regional Board's GIS database.

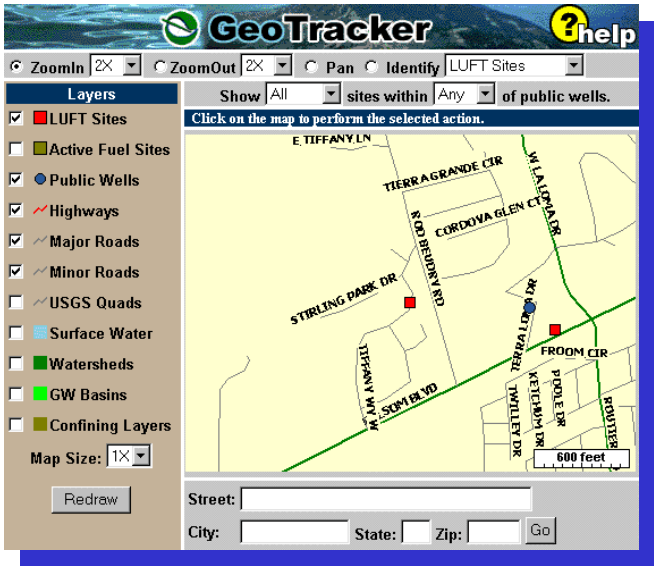
Leaking Underground Storage Tank Information System (LUSTIS) Upgrade

As of the end of the fiscal year, the Leaking Underground Storage Tank Information System (LUSTIS) database system was in the final transition process from Microsoft Access 7 to the GEIMS/Geotracker system. GEIMS is a data warehouse which tracks regulatory data about underground fuel tanks and public drinking water supplies. GeoTracker is a geographic information system (GIS) that provides online access to environmental data. GEIMS and GeoTracker were developed pursuant to a mandate by the California State Legislature (AB 592, SB1189) to investigate the feasibility of establishing a statewide GIS for leaking underground fuel tank (LUFT) sites.

GEIMS/GeoTracker is currently online. Our Region started updating their LUSTIS data through the Internet in real-time in May 2001. The Regional Board Underground Storage Tanks' web page has been modified to provide viewer with a direct link to the GEIMS/Geotracker home page. GEIMS/Geotracker is available to the public and can be accessed through the following link: http://geotracker.swrcb.ca.gov/.

Furthermore, the GEIMS/GeoTracker system provides options to generate MTBE reports or case reports for active and/or inactive cases that belong under either local and/or regional board jurisdiction.

Figure 8 – Example LUFT Site Location Using Geotracker:



Although a lot of effort has been put into converting our current LUSTIS to GEIMS/GeoTracker, our current LUSTIS is still an effective tool in managing and tracking LUST sites in general and Regional Board lead cases specifically. Additional fields have been added to our existing LUSTIS program to track incoming workplans to ensure that staff can respond to a submitted workplan in a timely manner. We have also added additional fields to help us prioritize investigation and cleanup cases, along with fields to determine whether a site conceptual model is required at a site. Additional printing/reporting options were added to allow staff to quickly print out a list of assigned cases that they have worked on over a specified period of time.

Underground Storage Tank Working Group

In order to enhance Regional Board's public outreach and solicit feedback from the public, the Underground Storage Tank Section formed a UST Working Group in 1997. The UST Working Group activities continued during this fiscal year. The group is composed of representatives from major oil companies, environmental consultants, environmental organizations, lawyers, banking industry, realtors, the California League of Cities, local agencies, and Regional Board staff.

The UST Working Group met three times during this fiscal year on August 29, 2000, February 12, 2001, and May 23, 2001. The meetings have covered a wide range of topics related to the Regional Board UST Program and participant interest. Topics during this year have included soil sampling and analytical testing methods, legislative updates, MTBE plume modeling, updates on GEIMS/GEOTRACKER database, cleanup technologies, environmental claims coverage, and implementation of the Draft MTBE Guidelines for California. The UST Working Group will continue its activities during fiscal year 01/02.

Santa Monica Bay Restoration Project

The Santa Monica Bay Restoration Projects continues its mission to implement the Bay Restoration Plan. Its primary tools for accomplishing this mission is a consensus-based approach, involving and coordinating the activities of stakeholder interests to achieve the goals of the SMBRP's Comprehensive Conservation and Management Plan (CCMP), known as the Bay Restoration Plan.

National Estuary Program (CWA Sec. 320) grant funding for core program staff along with funding from the State Water Resources Control Board was leveraged with funding from multiple sources to carry out the activities of the SMBRP.

Fiscal Year 00/01 Accomplisments

The accomplishments of the SMBRP include provide financing for implementation of the Bay Restoration Plan; promoting and implementing the Plan's pollution prevention, public health protection, and habitat restoration goals; and implementing research, monitoring, and public outreach priorities.

The list below summarizes key activities and accomplishments of the SMBRP during the past fiscal year (July 2000 through June 2001). Primarily noted are projects that have been accomplished directly by SMBRP program staff and/or those which SMBRP staff and Management Conference members have initiated and/or leveraged. These activities fulfilled the objectives of the SMBRP's annual work plan.

Financing Plan Implementation

- **Awarded $10 million in state bond financing for implementation of priority actions of the Bay Restoration Plan.** With passage of Proposition 12 in March 2000 came provisions for funds to finance implementation of the Bay Restoration Plan. During the 2000-2001 fiscal year, a watershed financing strategy was finalized, criteria were developed for selection of bond-funded projects, and a Request for Proposal package was prepared. The first cycle RFP was issued resulting in submittal of 63 proposals, totaling $33.4 million in funding requests. A Review Panel was organized, proposals were reviewed and ranked. At its April 2001 meeting, the Bay Watershed Council passed a resolution recommending funding for 26 projects totaling $10 million.

- **Supplemental Environmental Project (SEP):** Facilitated the use of Supplemental Environmental Project (SEP) funds to finance implementation of public outreach and research projects that implement the goals and actions of the Bay Restoration Plan. This effort includes development of technical scopes of work, management of contracts and oversight of projects funded through SEPs. New projects supported this fiscal year through SEPs include an evaluation of pathogen dispersion in storm water runoff, and assessments of factors impacting kelp habitat.

- **Public Involvement and Education mini-grants program:** This fiscal year, SMBRP continued implementation of the Public Involvement and Education mini-grants program, providing support and oversight for ten Round 5 programs. These involvement and education projects address a broad spectrum of Bay Restoration Plan issues, including wetlands; fish consumption outreach through local Asian/Pacific Islander community organizations; outreach to the development community regarding storm water runoff;

health of marine mammals in the Bay; small quantity hazardous waste generation and K-12 education. All ten Round 5 programs concluded in June 2001.

- **Clean Beaches Initiative:** SMBRP organized and facilitated the prioritization of projects within Los Angeles County that could potentially be funded through the Governor's Clean Beaches Initiative. This initiative is intended to reduce beach closures due to pathogen contamination in California. Funding of projects will be dependent upon the state budget process.

- **Financing Workshop for California's National Estuary Programs.** SMBRP assisted in developing this workshop, which was tailored to address the financing/institutional mechanisms specific to agencies in California, was attended by staff and partner organizations associated with the SMBRP, Morro Bay NEP, San Francisco Estuary Project and EPA.

Pollution Prevention, Health Risk Reduction and Habitat Restoration

- **Santa Monica Bay Marine Habitats and Resources Inventory in CD-ROM format.** SMBRP completed this multi-year project, conducted in partnership with the UCLA Department of Biology, which conducted its work under the auspices of a grant from the National Science Foundation. The inventory includes species-specific and habitat-specific summaries (characteristics, ecology, available population data, etc.); GIS-based maps on the extent and distribution of coastal habitats (sandy beaches, rocky intertidal areas, coastal wetlands, and kelp canopy); photographs and narrative. These elements have all of been integrated into a presentation tool that is now available to natural resource managers and as a reference/educational tool for middle-school to university level students. This project fulfilled a priority goal of the Bay Restoration Plan, i.e. to promote appreciation of the Bay's living resources.

- **Kelp Habitat Restoration:** Completed the first phase of a long-term effort to restore kelp habitat in Santa Monica Bay. The project involved quantification of the present distribution and abundance of kelp forests in northern Santa Monica Bay and measurements of a suite of physical and chemical factors that may affect kelp distribution and abundance.

- **Septic System Management Report:** Completed a comprehensive report regarding management and oversight of septic systems in northern Santa Monica Bay watersheds. This report concluded the primary efforts of a multi-agency Septics Management Task Force, organized by the SMBRP. This effort included coordination of Task Force meetings, continued evaluation of program models in other locales, and facilitating the development of joint recommendations for action. This report was finalized in January 2001 with approval by the Bay Watershed Council in February 2001 that the recommendations be incorporated as an element of the CCMP. Continuing efforts are underway to work with local agencies to promote implementation.

- **Malibu Creek Watershed:** Completed a comprehensive review and evaluation of Bay Restoration Plan implementation progress in the Malibu Creek watershed. This "report card" summarizes the progress achieved by stakeholder groups in the Malibu Creek watershed to implement the 44 actions of the Malibu Creek Watershed Action Plan. Development of this report involved extensive input and feedback from watershed stakeholders. The report summarizes accomplishments and obstacles to implementation, identifies key successes in the watershed and further implementation needs, and assesses implementation progress.

- **Storm Water and Urban Runoff:** Conducted a comprehensive review and evaluation of implementation progress with regard to the Storm Water and Urban Runoff element of the Bay Restoration Plan. This effort includes extensive file reviews, data collection, interviews and surveys of all storm water management agencies in the Santa Monica Bay watershed with regard to implementation of municipal, industrial and construction storm water NPDES permits. This assessment will include summaries regarding progress achieved in program management, oversight and implementation, public outreach and monitoring.

- **Lower Zuma Creek Wetlands and Lagoon Restoration:** Continued partnership on restoration activities with the National Park Service-Santa Monica Mountains National Recreation Area and the Los Angeles County Department of Beaches and Harbors. Ongoing community involvement in planting activities and removal of invasive species. With partner agencies, continued development of interpretive displays at the site.

- **Boater Education Program:** Implemented programs focused on preventing boat sewage and used oil discharges into marinas, coastal waters and lakes. Developed new "Clean Boating" posters to marinas in Los Angeles, Ventura and Orange Counties. Completed a marina recycling signs project. Developed and distributed the "Changing Tide" newsletter. Developed materials and conducted a post-program boater survey. Developed and produced a "first in the nation" Clean Boating video. In May 2001, the SMBRP/Foundation received the California Environmental Protection Agency's *Program Excellence Award* for its Boater Education Program (BEP). The award acknowledged the SMBRP/F for its innovative efforts to reach local watercraft owners and also recognized the program as an outstanding model of how programs can communicate a core of community-specific messages on pollution prevention and environmental stewardship.

Research, Monitoring and Public Outreach

- **Santa Monica Bay Comprehensive Monitoring Program:** Completed the findings and recommendations for the program. Began organization of the Monitoring Policy Committee to facilitate multi-agency implementation of the recommendations. The implementation of this project is a priority for FY 2001-02.

- **Provided staff support to the Bay Watershed Council, Steering and Technical Advisory Committees:** These committees provide policy, programmatic and technical guidance to the program. This year, significant effort was focused on institutional structure and leadership issues associated with the long-term governance of the SMBRP. Recommendations and a report to the Legislature are due in the 2001-02 fiscal year.

- **Southern California Beach Valuation Study**: Provided technical, administrative and personnel support to the study. In accordance with a cooperative agreement between funding agencies, the SMBRP provides support to oversee the execution of several contracts and coordinates with the study team in developing and reviewing the study design and its implementation. The main survey is in progress with the screener survey completed and the first three waves of the diary survey completed. Santa Monica Bay is the primary target of this study.

- **Santa Monica Bay atmospheric deposition research project:** Continued technical and administrative support to the project. The first phase of this project has been focused on assessment of pollutant (toxic and nutrient) loads.

- **SMBRP outreach activities:** Activities included updates and revision to the SMBRP website, production of newsletters, participation in workshops, fairs and festivals, preparation of a new SMBRP brochure.

- **Technical support to stakeholder committees:** Provided support addressing a multitude of Bay Restoration Plan priorities. Issues include: remediation of DDT contamination on the Palos Verdes Shelf, contaminated sediments in Southern California coastal waters, Malibu Lagoon and Creek restoration, task force on beach closures, development of trash and pathogen TMDLs, steelhead recovery and nonpoint source grants and storm water management.

Figure 9 - SMBRP Outreach Activities:

Regional Monitoring

One of the goals of the Regional Board is to protect water quality and the beneficial uses of the receiving waters throughout the Los Angeles Region. The Pacific Ocean and other coastal waters of the region support recreation, sport and commercial fishing, wildlife habitat and other beneficial uses. Although large amounts of money are spent on ocean monitoring, some basic questions about the ocean's condition, such as the level of impact on fisheries and other ocean resources, remain difficult to answer.

Much of the monitoring conducted in the Los Angeles Region is "compliance monitoring", i.e., monitoring associated with waste discharge requirements that is focused on site-specific, single-source issues. While these programs generally collect high quality data, they are not designed to describe changes that occur on regional scales or to assess cumulative impacts from multiple sources.

Recognizing the need for an integrated assessment of coastal ocean waters, the U.S. Environmental Protection Agency, the Los Angeles Regional Board and the Santa Monica Bay Restoration Project in recent years have been working to develop regional monitoring programs. The objective is to combine more tightly focused compliance monitoring programs with broader based regional status and trends monitoring.

Several efforts are underway to promote regional monitoring of ocean waters. The Los Angeles Regional Board cooperated with several regulatory and discharger agencies to conduct regional sampling programs throughout the Southern California Bight (300 kilometers of coastline between Point Conception in central California and Cabo Colnett south of Ensenada, Mexico) in 1994 (Southern California Bight Pilot Project) and 1998 (Bight'98). Planning is expected to commence soon for the third regional monitoring program, to be conducted in 2002 or 2003. The Santa Monica Bay Restoration project adopted recommendations in 2000 for modifications to large compliance monitoring programs to provide more comprehensive, regional monitoring of the bay's resources. The Los Angeles Regional Board also participates in Statewide monitoring programs, such as the Mussel Watch Program, Toxic Substances Monitoring Program, and Coastal Ambient Monitoring Program. Board staff plans to incorporate these programs into the aforementioned regional monitoring programs to the extent practicable. This was the focus of activity during the 2000-2001 fiscal year.

Fiscal Year 00/01 Accomplishments:

Accomplishments include the completion of two monitoring reports, production of a guidance document for the development of a model monitoring program for large ocean dischargers, incorporation of recommendations into NPDES programs.

- **Santa Monica Bay Restoration Project Technical Advisory Committee**: The Committee met several times to review Proposition 12 proposals and to rank top proposals recommended for funding. Four projects were selected for funding and the committee met to provide comments on scope of work for the final proposals.
- **Southern California Coastal Waters Research Project (SCCWRP) Commission's Technical Advisory Group:** The Technical Advisory Group attended meetings, finalized the 5-year Research Plan, and developed a guidance document for the development of a model monitoring program.

- **State Toxic Substances Monitoring Program:** As part of a statewide monitoring effort, the Regional Board designed a sampling program to assess contaminant levels present in muscle tissue of several species of fish commonly caught and consumed by recreational anglers. Staff selected sampling stations for follow-up sampling in fiscal year 2001-02 and will assist Department of Fish and Game in collection of fish samples during the next fiscal year.

- **Bight '98 Ocean Regional Monitoring**: The final report on the wet-weather follow-up study was approved and posted on the SCCWRP web site. The draft report for water quality components of the Bight'98 survey was completed. Planning for the next regional monitoring survey, currently scheduled for 2002 or 2003, was initiated by the steering committee.

- **Surface Waters Ambient Monitoring Program:** Staff assisted Regional Programs section in the development of monitoring programs to characterize water quality and assess beneficial uses in inland watersheds. Staff met with California Department of Fish and Game to develop monitoring strategies for the regions watersheds and attended statewide roundtable meetings to discuss distribution of funds and program objectives

- **Southern California Caulerpa Action Team**: Several meetings were held to discuss progress of eradication efforts in Agua Hedionda Lagoon and Huntington Harbor to eliminate "killer algae" (Caulerpa), and to discuss plans to survey other areas of Southern California, public outreach efforts, and a proposed bill to ban Caulerpa in California.

- **Coastal Ambient Monitoring Program:** Results from the first two years of sampling under this program were reviewed and recommendations for follow-up sampling during Year 3 in areas with potential for human health risks developed.

- **NPDES Permit Support:** In order to provide assistance to regulatory units regarding permit issues with ocean dischargers, Regional Monitoring staff attended meetings to discuss the ocean monitoring program components of the City of Los Angeles' Hyperion permit and County Sanitation Districts of Los Angeles' Joint Water Pollution Control Plant permit, and the renewal of the City of Los Angeles MS4 (stormwater) permit. In addition, staff attended meetings with the City of San Buenaventura to discuss proposed studies related to discharges to the Santa Clara River Estuary, and the Alameda Corridor Transportation Authority Oversight Committee to discuss harbor circulation monitoring studies, toxicity testing, chelation stability test results, and potential offset projects to mitigate discharge of metals into Dominguez Channel/Los Angeles Harbor.

Staff Recognition

The following staff received awards or other recognition this fiscal year for their contributions to the Board's mission:

In May 2001, the **LARWQCB** was awarded **first place for Environmental Leadership from Keep California Beautiful**. The award recognized the Board's efforts in eliminating trash from our waterways, as required by the Los Angeles River Trash Total Maximum Daily Load.

2001 Annual Water Quality Awards: To recognize the important contribution to the mission of the Los Angeles Regional Water Quality Control Board by individuals, groups, and organizations that have made a singular contribution to water quality, the Regional Board has established an awards program intended to acknowledge and honor their efforts. On April 19, 2001, the Regional Board inaugurated an annual awards event to highlight significant efforts to protect and restore water quality in our Region. Over 250 people attended the awards dinner program.

Deborah Smith co-authored a paper related to the compilation and analysis of data used in the Board's comprehensive Basin Plan update in 1994 as well as required water quality assessments: Hromadka, T.V., D.J. Smith and C.C. Yen. 2000. Development of Database and Statistical Analysis of Water Quality Data for the Los Angeles Region, California. Journal of Floodplain Management, Vol. 2, No. 1.

Elizabeth Erickson, TMDL Unit and **John Geroch**, Site Cleanup Unit each received the **Sustained Superior Accomplishment Award** in April 2001 for outstanding job performance over and above normal job expectations for a period of not less than two years.

The **TMDL team**, which included Lisa Carlson, Rod Collins, Renee DeShazo, Don Duke, Elizabeth Erickson, Melinda Merryfield-Becker, Tracy Woods, Ed Schumacher, Jeremy Sokulsky, and Myriam Zech, received the **2000 Outstanding Achievement Award**. The group received this award for their teamwork and participation in the design and preparation of the first of many TMDLs of the 95 TMDL groups which are required. The team's skill, dedication, innovation, and attitude have contributed to the region having a strategy that will address all of the impaired waterbodies in a timely manner.

Tony Risk, TMDL Unit, was given a **Letter of Appreciation** in March 2001 from the County of Los Angeles for his presentation on the California Regional Water Quality Control Board. In addition, he received the **Recruitment Award** for his dedication and participation as a Recruitment Coordinator for the State Water Resources Control Board.

Ana Townsend, Site Cleanup I Unit, received the **CAL EPA Customer Service Award** in January 2001.

In May 2001, the **Santa Monica Bay Restoration Project/Foundation** received the California Environmental Protection Agency's **Program Excellence Award** for its Boater Education Program (BEP). The award acknowledged the SMBRP/Foundation for its innovative efforts to reach local watercraft owners and also recognized the program as an outstanding model of how programs can communicate a core of community-specific messages on pollution prevention and environmental stewardship.

Regional Board Management Team

Executive Office

Dennis Dickerson	Executive Officer
Deborah Smith	Assistant Executive Officer
Dennis Dasker	Assistant Executive Officer
Jorge Leon	Legal Counsel

Section Chiefs

David Bacharowski	Underground Tanks
Jon Bishop	Regional Programs
Pat Guokas	Administrative Services
Arthur Heath	Remediation
Wendy Phillips	Storm Water
Mark Pumford	Watershed Regulatory
Paula Rasmussen	Enforcement and Groundwater Permitting

Director, Santa Monica Bay Restoration Project

Marianne Yamaguchi

Appendix

Administrative Civil Liabilities Issued during the 00/01 Fiscal Year:

ACL Number	Facility Name	Date Issued	Final Penalty Amount
01-062	Ventura Regional Sanitation District	5/21/01	$81,000
00-171	LA County Sanitation District	5/18/01	$ 89,690
01-063	Quality paper Fibers, Inc.	5/17/01	$ 2,980
01-035	Speiker properties	5/10/01	$ 3,000
01-059	LA DWP	5/7/01	$ 3,000
01-048R	Eppink of California	5/4/01	$ 1,000
01-046	Lithonia West	5/4/01	$ 2,980
01-038	Whitcomb Plating, Inc.	5/4/01	$ 2,980
01-037	Creftcon Industries	4/25/01	$ 2,980
01-045R	UNOCAL Corporation	4/23/01	$ 6,000
00-102R	Santa Catalina Island Company	4/23/01	$ 127,158
01-033	PAKTANK Corporation	3/20/01	$ 3,000
01-013	W-B Limited	3/9/01	$ 3,000
00-189	HPG Management	2/20/01	$ 3,000
00-190	Hermetic Seal	2/16/01	$ 3,000
01-018	Ashland Chemical	2/14/01	$ 3,000
00-156	Spencer Die Casting	2/13/01	$ 4,200
00-159	Skipower Plating Works	2/12/01	$ 4,200
00-153	Chuck's Auto Parts and Salvage	2/9/01	$ 4,200
01-001	LA County Museum of Natural History	2/9/01	$ 3,000
01-020	Cal State Long Beach	2/8/01	$ 12,000
01-022	City Of Pasadena DWP	2/6/01	$ 3,000
00-173	Air Products	2/5/01	$ 3,000
01-007	Malibu Bay Club	1/29/01	$ 25,790
00-187R	Redman Equipment & Manufacturing	1/12/01	$ 6,000
00-172	City Of Los Angeles DWP	12/27/00	$ 3,000
00-185	Spyglass Homeowners Association	12/27/00	$ 3,000
00-188	HR Textron	12/27/00	$ 3000
00-193	Ormond Beach Power Generation	12/27/00	$ 3,000
00-186	HPG Management	12/27/00	$ 3,000
00-152	Pnuemo Abex Aerospace	12/20/00	$ 3,000
00-041R	Wilshire West Partners	10/13/00	$ 169,690
00-101	D.R. Horton Los Angeles Holding	10/2/00	$ 101,913
00-123	SoCal Metals	10/2/00	$ 43540
00-122R	City of San Buenaventura	9/29/00	$ 129,858
00-115	PDS Engineering Construction	9/29/00	$ 24,000
00-133	Waste Management of California	9/27/00	$ 20,000
00-117	Chevron	8/30/00	$ 1,550,000
00-062	Alameda Corridor Transportation Authority	8/30/00	$ 182,538
00-103	Rose Hills Memorial Park	8/15/00	$ 55,075